

TA-FB930R

SERVICE MANUAL

AEP Model



Photo: BLACK model

SPECIFICATIONS

Amplifier section

DIN power output
120 W + 120 W (4 ohms at 1 kHz)
80 W + 80 W (8 ohms at 1 kHz)

Total harmonic distortion
Less than 0.008% (at 10 W output)

Frequency response
PHONO (20 Hz - 20 kHz): RIAA equalization curve
 ± 0.5 dB
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD:
7 Hz - 100 kHz ± 3 dB

S/N (network A)
PHONO
94 dB
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD:
105 dB

Output voltage/impedance
REC OUT 1, 2: 150 mV, 1 kilohm
PHONES: 10 mW (at 8 ohms)

Speakers impedance
4 - 16 ohms, 8 - 16 ohms (SPEAKERS A+B)

Damping factor
100 (8 ohms, 1 kHz)

General

System
Power amplifier: Pure-complementary SEPP OCL
power amplifier with all stages directly coupled
Preamplifier: Low-noise, equalizer amplifier

Power requirements
230 V AC, 50/60 Hz

Power consumption
210 W

Dimensions (approx.) (w/h/d)
430 × 150 × 410 mm
incl. projecting parts and controls

Mass (approx.)
10.3 kg

Supplied accessories

- Remote commander (remote) (1) RM-S316
- Sony batteries R6 (size-AA) (2)

Design and specifications are subject to change without notice.

INTEGRATED STEREO AMPLIFIER





SONY®

TABLE OF CONTENTS

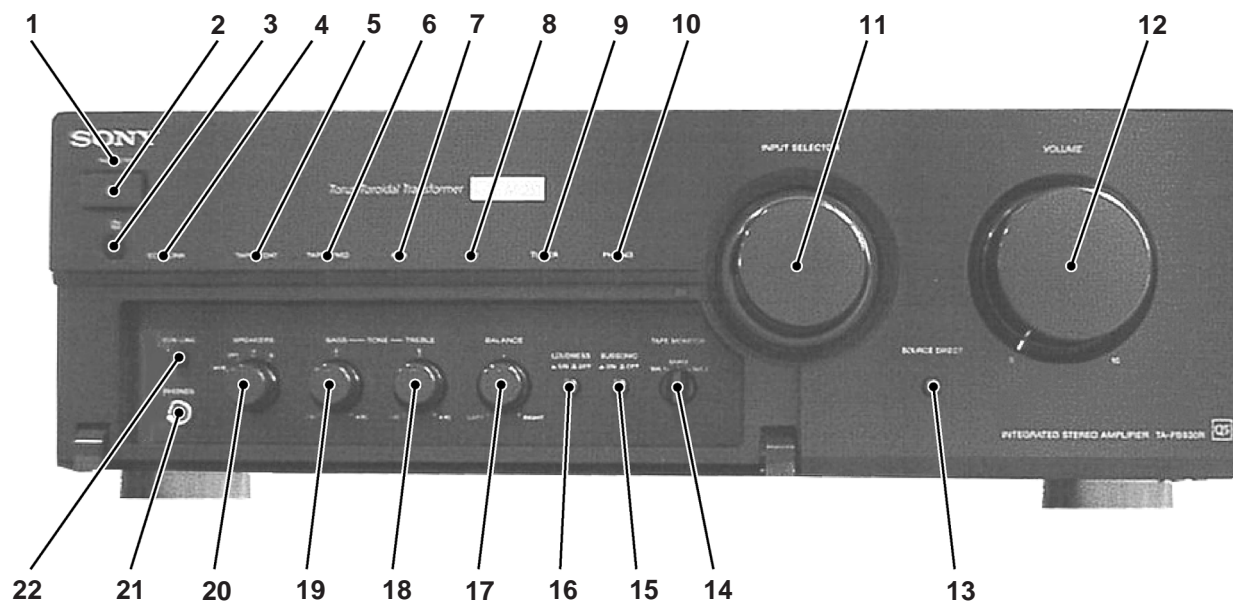
1. GENERAL	3
2. ELECTRICAL ADJUSTMENT	4
3. DIAGRAMS	
3-1. Circuit Boards Location	5
3-2. Schematic Diagram – Input Section –	6
3-3. Printed Wiring Board – Input Section –	7
3-4. Schematic Diagram – Main Section –	8
3-5. Printed Wiring Board – Main Section –	9
3-6. Schematic Diagram – Panel Section –	10
3-7. Printed Wiring Board – Panel Section –	11
3-8. Schematic Diagram – Power Section –	12
3-9. Printed Wiring Board – Power Section –	13
3-10. IC Block Diagrams	14
3-11. IC Pin Function	14
4. EXPLODED VIEW	
4-1. Case Section	15
4-2. Front Panel Section	16
4-3. Chassis Section	17
5. ELECTRICAL PARTS LIST	18

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

Front Panel Descriptions

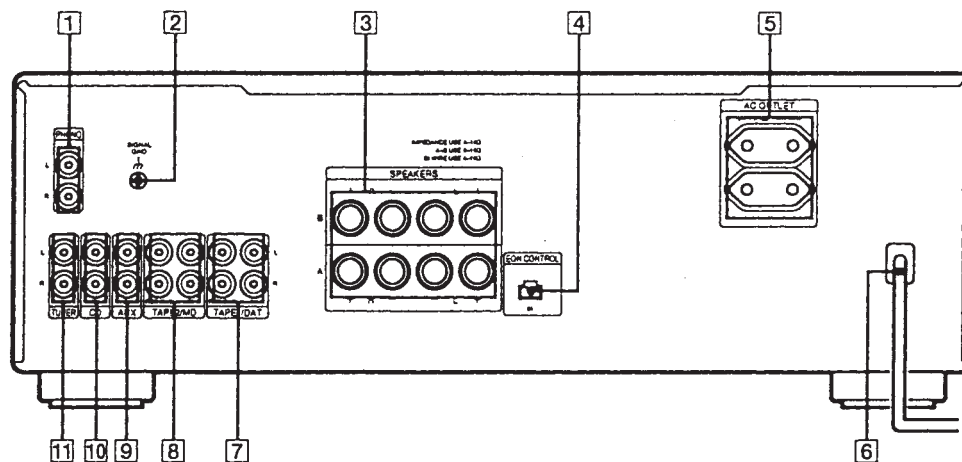


- 1 PROTECTION indicator
- 2 (Power) button
- 3 Remote sensor
- 4 EON LINK indicator
- 5 TAPE 1/DAT indicator
- 6 TAPE 2/MD indicator
- 7 AUX indicator
- 8 CD indicator
- 9 TUNER indicator
- 10 PHONO indicator
- 11 INPUT SELECTOR knob

- 12 VOLUME knob
- 13 SOURCE DIRECT button and indicator
- 14 TAPE MONITOR knob
- 15 SUBSONIC button
- 16 LOUDNESS button
- 17 BALANCE knob
- 18 TREBLE knob
- 19 BASS knob
- 20 SPEAKERS knob
- 21 PHONE jack
- 22 EON LINK button

This section is extracted from instruction manual.

Rear Panel Descriptions



- 1 PHONO
- 2 h (SIGNAL GND)
- 3 SPEAKERS A/B
- 4 EON CONTROL IN
- 5 AC OUTLET (unavailable on the TA-FB920R (U.K. model))

- 6 Mains lead
- 7 TAPE1/DAT
- 8 TAPE2/MD
- 9 AUX
- 10 CD
- 11 TUNER

SECTION 2 ELECTRICAL ADJUSTMENT

Bias Adjustment



NOTE:

1. Perform the adjustment after the unit has warmed up sufficiently.
2. Perform the bias adjustment if the power transistor has been replaced.

Procedure:

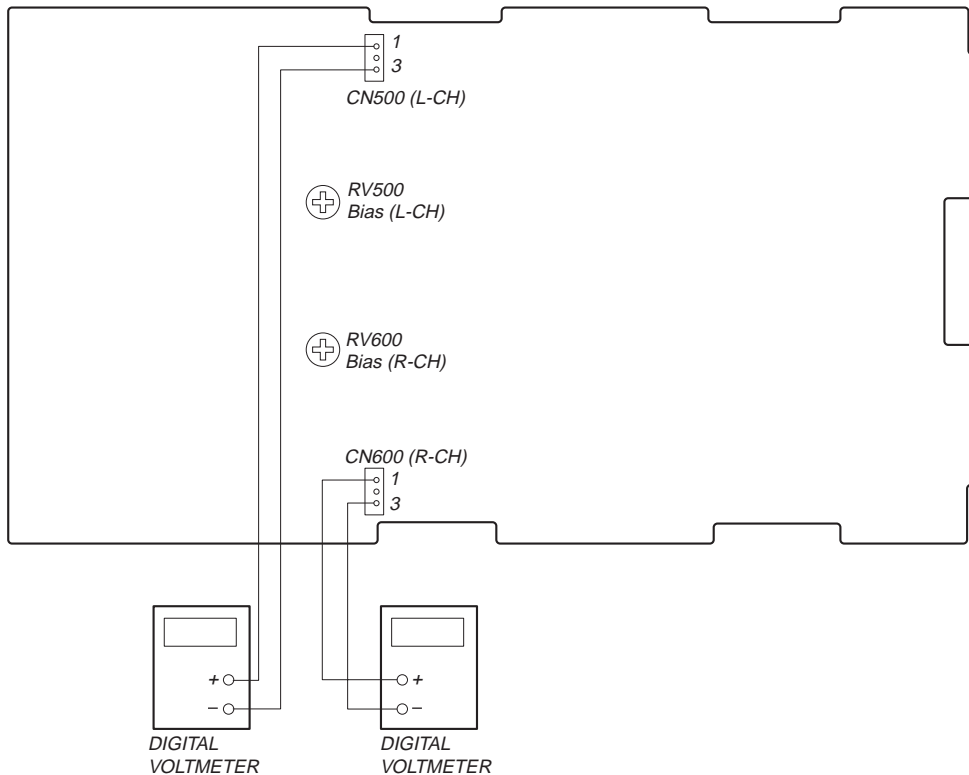
1. Rotate fully the bias adjusting semi-fixed resistors (RV500, RV600) to the MIN position (counterclockwise).
2. Connect a digital voltmeter to the CN500 and CN600.

	1 pin	3 pin
CN500 (L-CH)	+	–
CN600(R-CH)	+	–

3. Set the slide regulator to 0V, and press the  button (ON) on the set.
4. Raise gradually the slide regulator voltage up to the rated voltage.
5. At this time, confirm that the SP relay is turned on (it will click).
6. Adjust the RV500 and RV600 so that a reading of digital voltmeter is 10 ± 1 mV.
7. Return the slidack to 0 V, and press the  button (OFF) on the set.

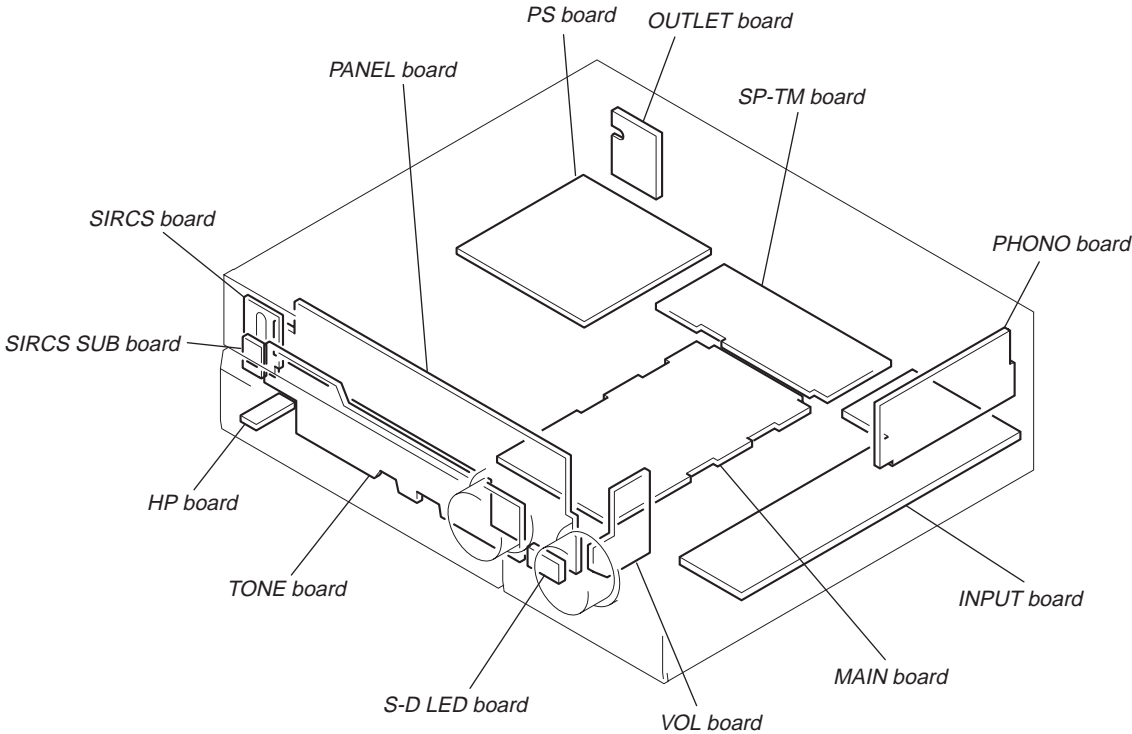
Adjustment Location :

[MAIN BOARD] – COMPONENT SIDE –



SECTION 3
DIAGRAMS




3-1. CIRCUIT BOARDS LOCATION







THIS NOTE IS COMMON FOR PRINTED WIRING
BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed
in each block.)

For schematic diagrams.

Note:




- All capacitors are in μF unless otherwise noted. pF: μpF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- Δ : internal component.
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : POWER ON
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 : TUNER
- Abbreviation
G : German model.
EE : East European model.
AUS : Australian model.
SP : Singapore model.
MY : Malaysia model.

For printed wiring boards.

Note:

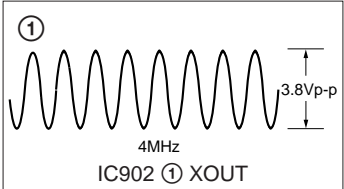
-  : parts extracted from the component side.
-  : parts extracted from the conductor side.
-  : Pattern from the side which enables seeing.

Indication of transistor

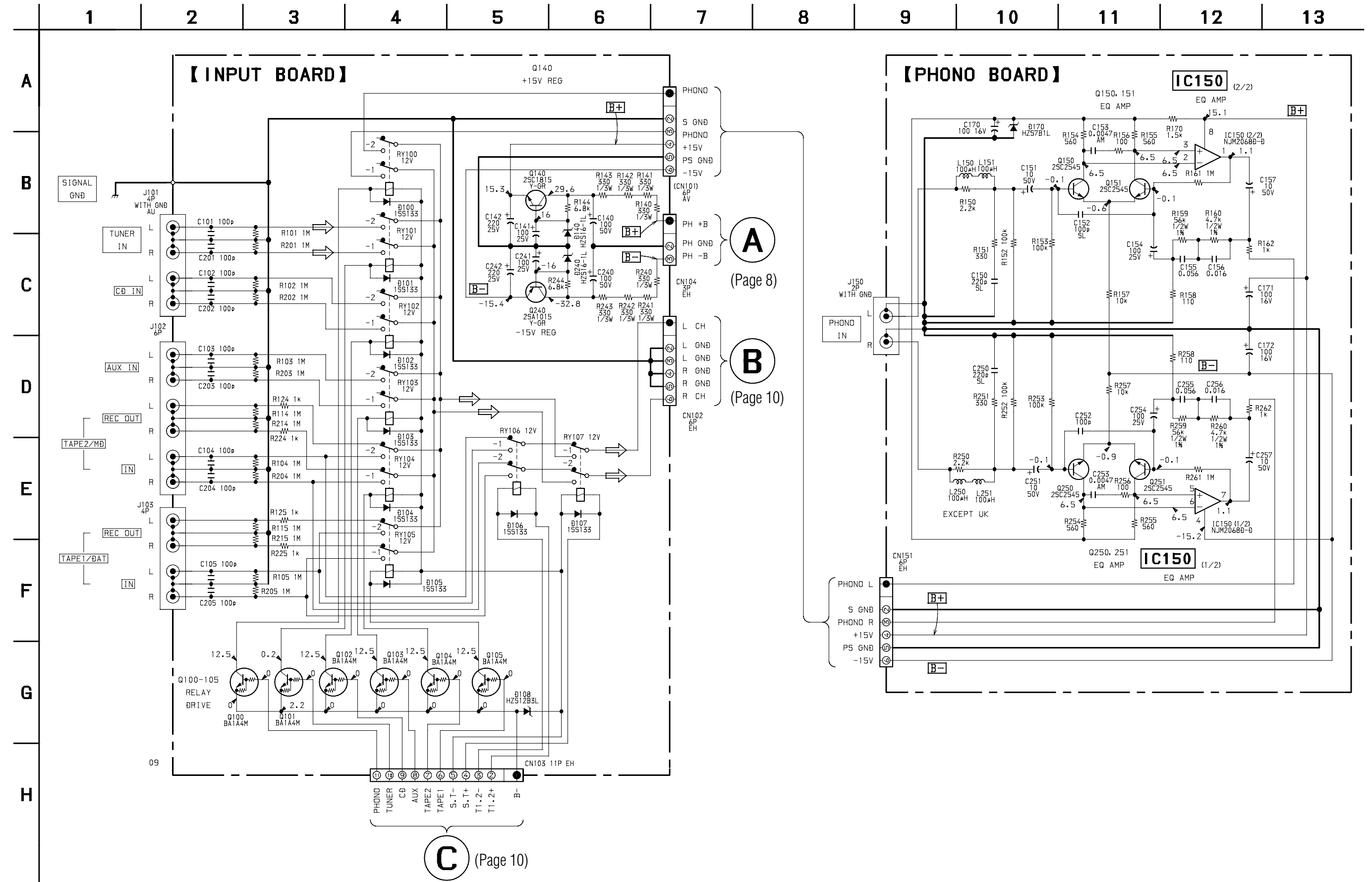


These are omitted

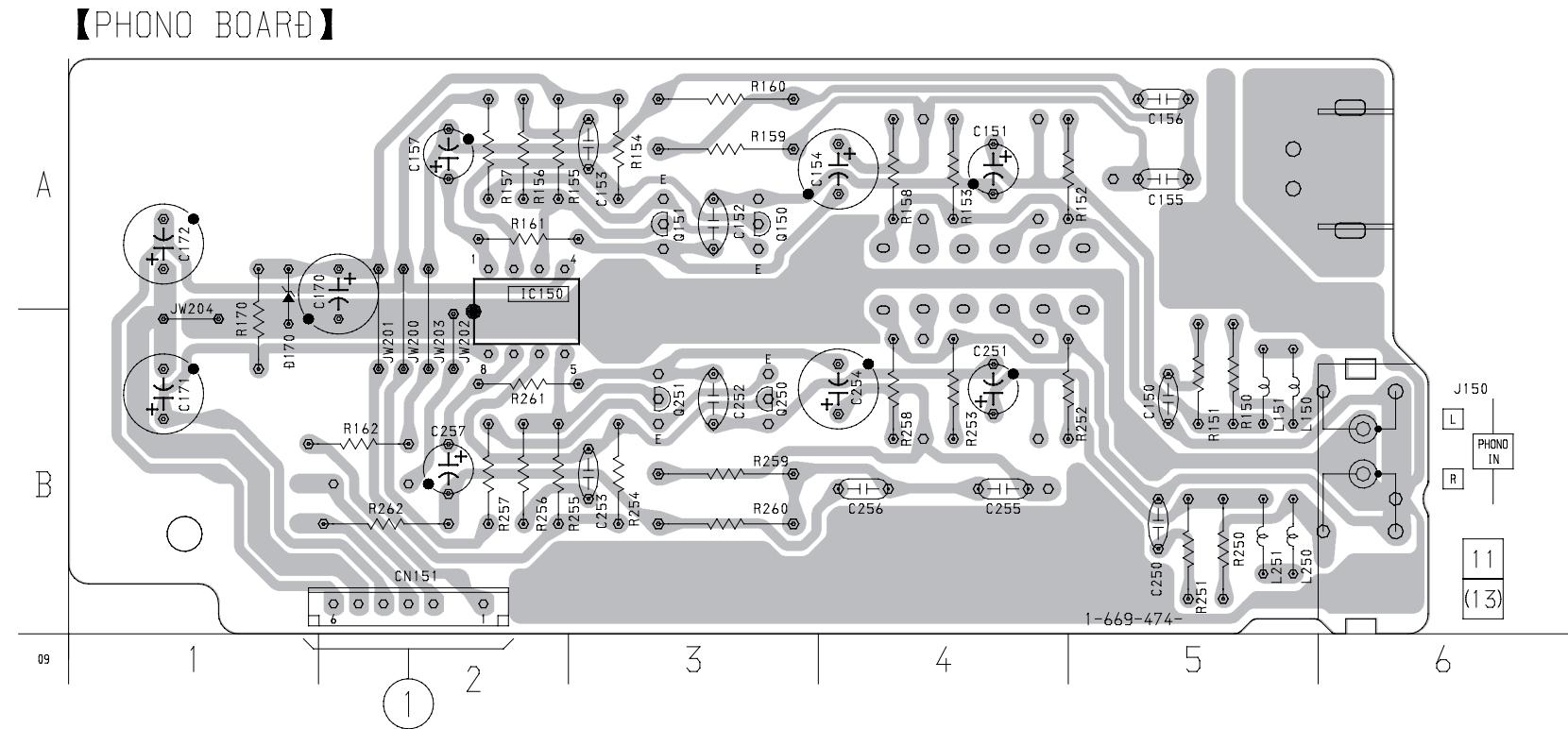
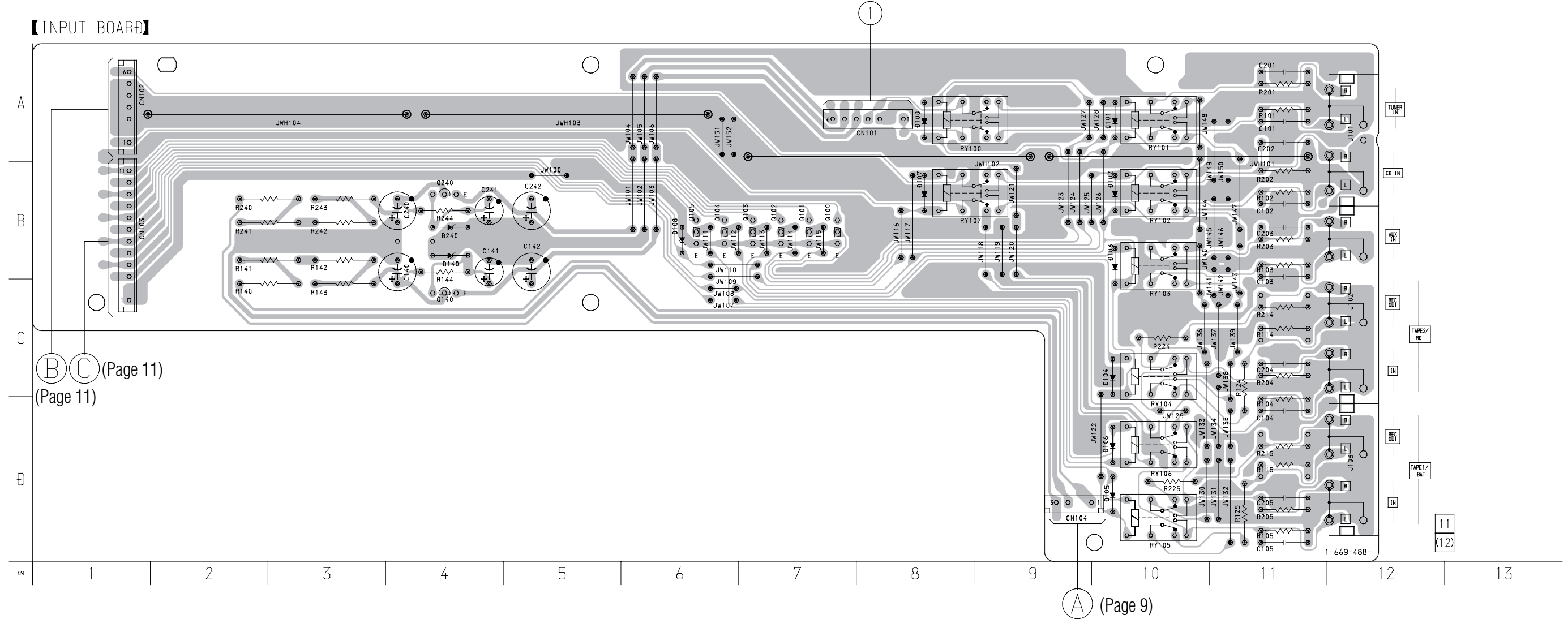
WAVEFORM



3-2. SCHEMATIC DIAGRAM – INPUT SECTION –



3-3. PRINTED WIRING BOARD – INPUT SECTION –
• See page 5 for Circuit Boards Location.

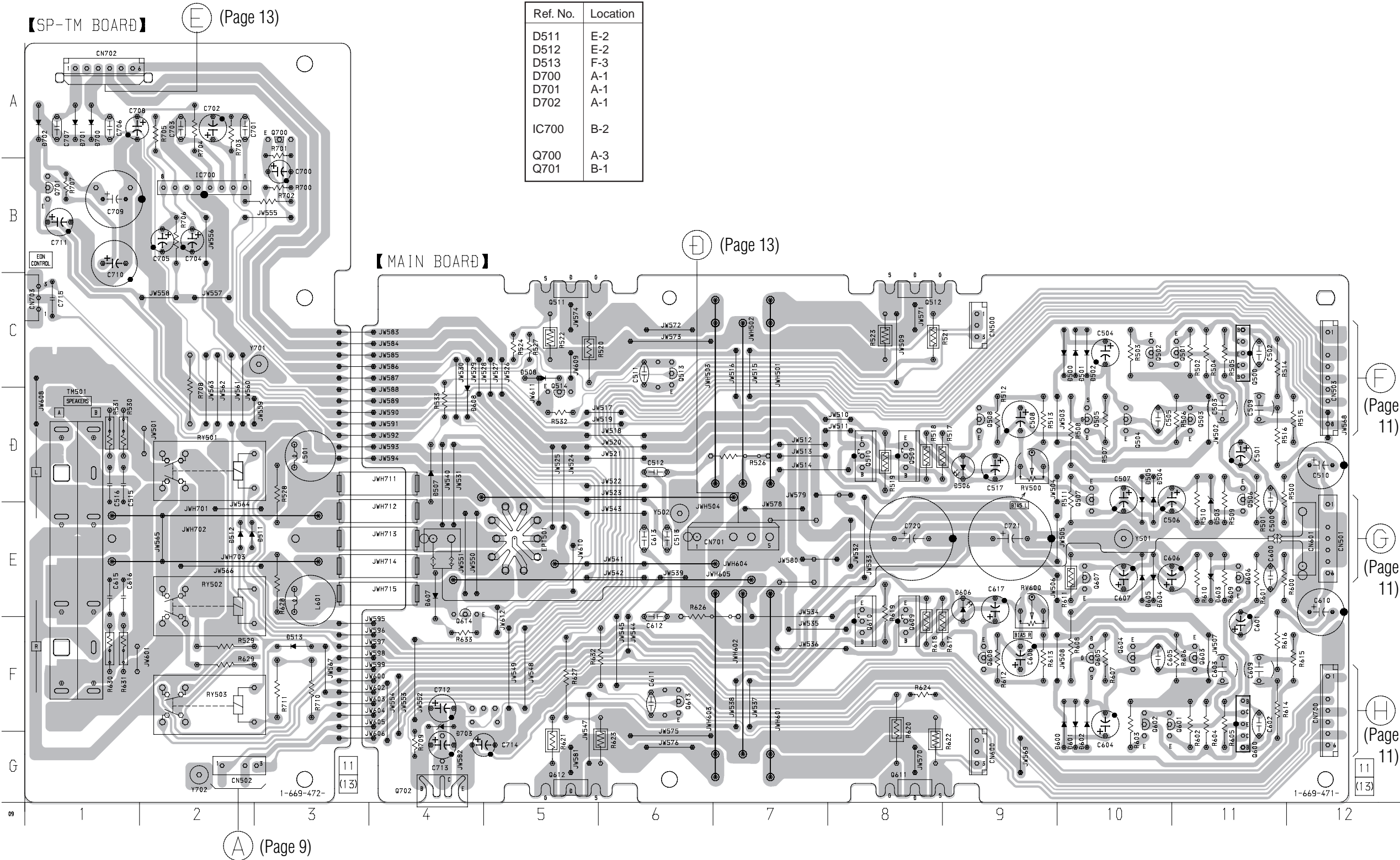


• Semiconductor Location

Ref. No.	Location
D100	A-8
D101	A-10
D102	B-10
D103	B-10
D104	C-10
D105	D-10
D106	D-10
D107	B-8
D108	B-6
D140	B-4
D240	B-4
Q100	B-7
Q101	B-7
Q102	B-7
Q103	B-7
Q104	B-6
Q105	B-6
Q140	C-4
Q240	B-4



3-5. PRINTED WIRING BOARD – MAIN SECTION –
• See page 5 for Circuit Boards Location.



• Semiconductor Location

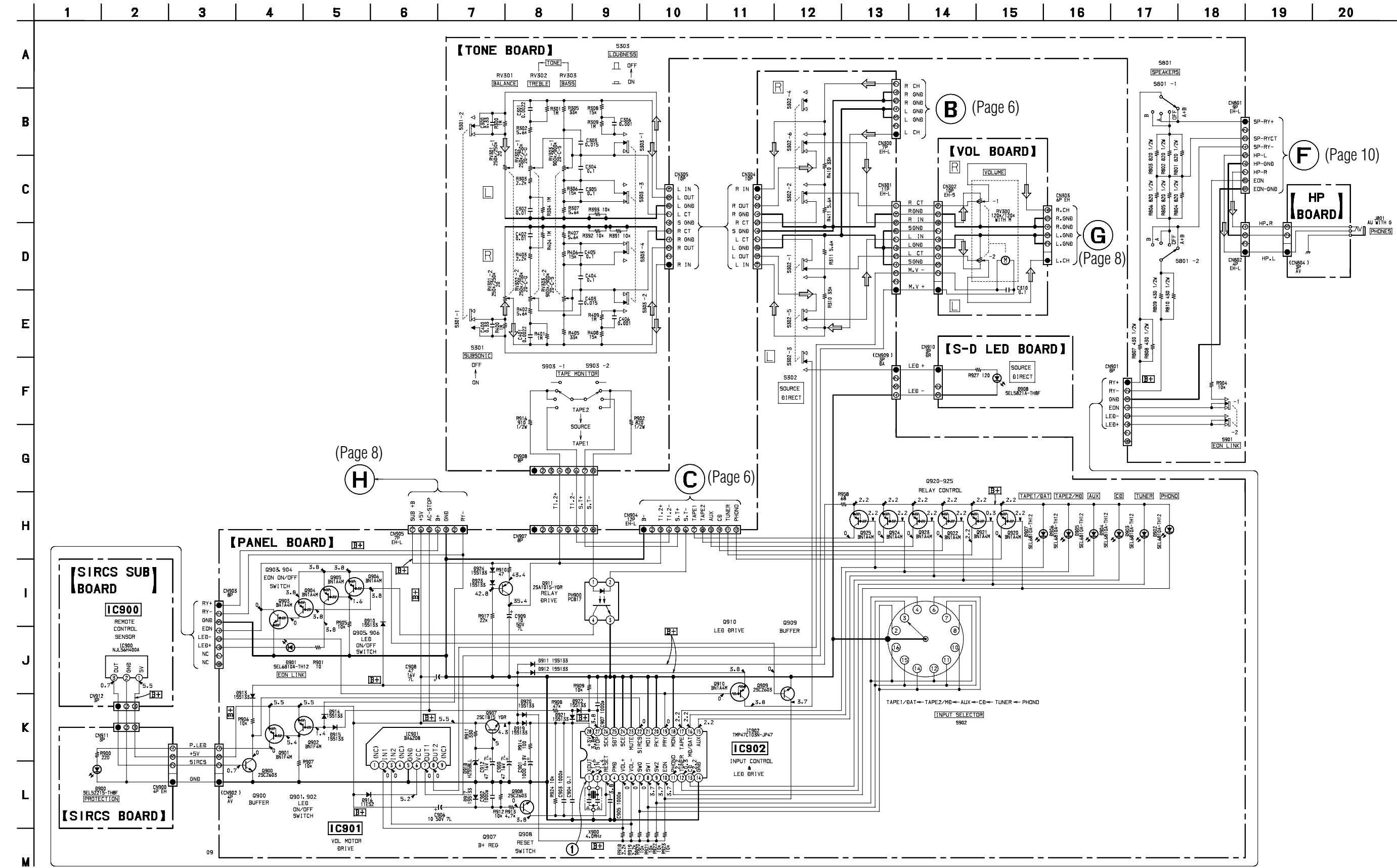
Ref. No.	Location
D511	E-2
D512	E-2
D513	F-3
D700	A-1
D701	A-1
D702	A-1
IC700	B-2
Q700	A-3
Q701	B-1

• Semiconductor Location

Ref. No.	Location
D500	C-10
D501	C-10
D502	C-10
D503	D-11
D504	E-10
D505	E-10
D506	D-9
D507	D-4
D508	C-5
D600	F-10
D601	F-10
D602	F-10
D603	E-11
D604	E-10
D605	E-10
D606	F-9
D607	E-4
D608	C-4
D703	F-4
Q500	C-11
Q501	C-10
Q502	C-10
Q503	D-11
Q504	D-10
Q505	D-10
Q506	D-11
Q507	E-10
Q508	D-9
Q509	D-8
Q510	D-8
Q511	C-5
Q512	C-8
Q513	C-6
Q514	D-5
Q600	F-11
Q601	F-10
Q602	F-10
Q603	F-11
Q604	F-10
Q605	F-10
Q606	E-11
Q607	E-10
Q608	F-9
Q609	F-8
Q610	F-8
Q611	G-8
Q612	G-5
Q613	F-6
Q614	E-4
Q702	G-4

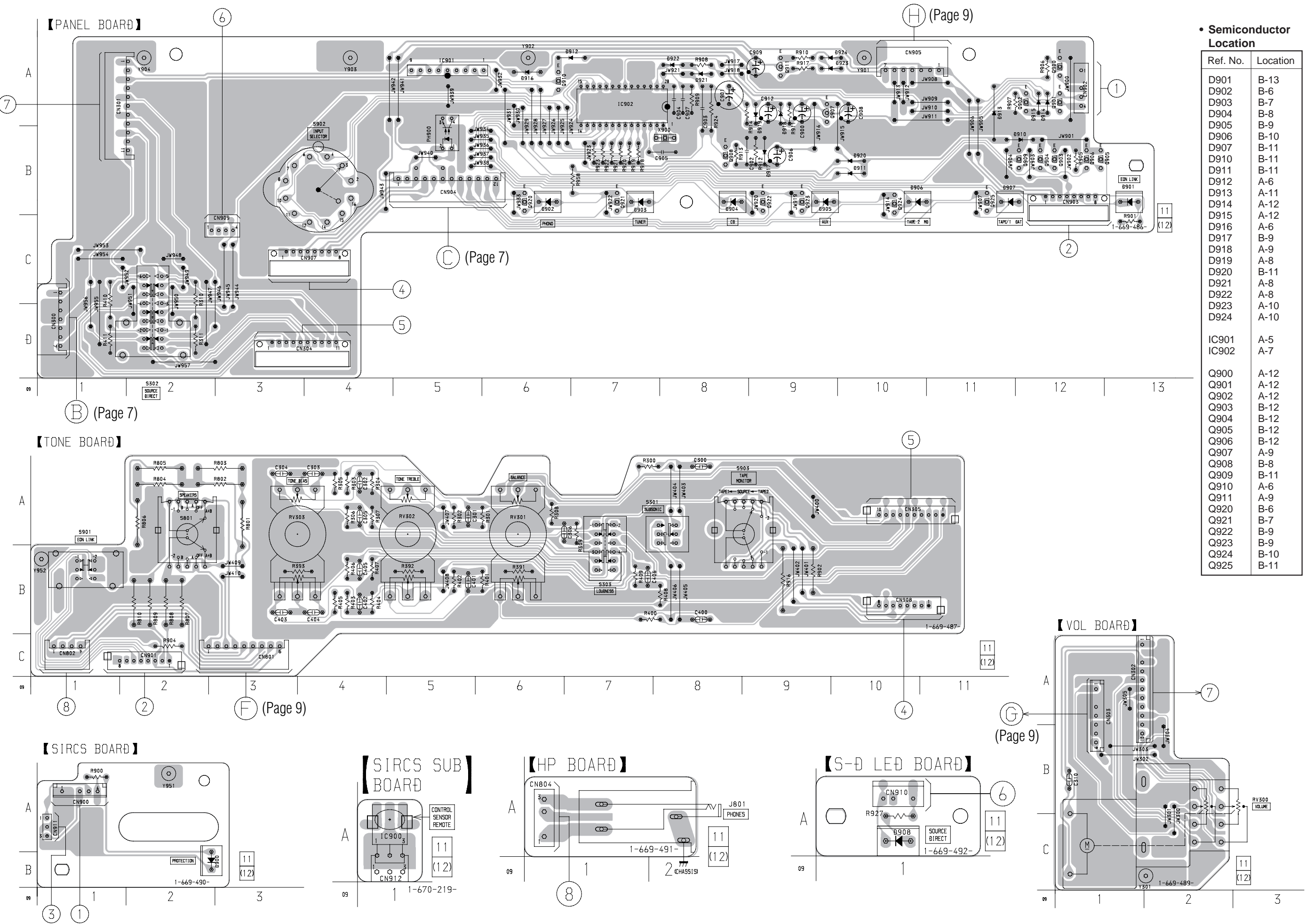
3-6. SCHEMATIC DIAGRAM – PANEL SECTION –

- See page 5 for Waveform.
- See page 14 for IC Block Diagrams.
- See page 14 for IC Pin Function.

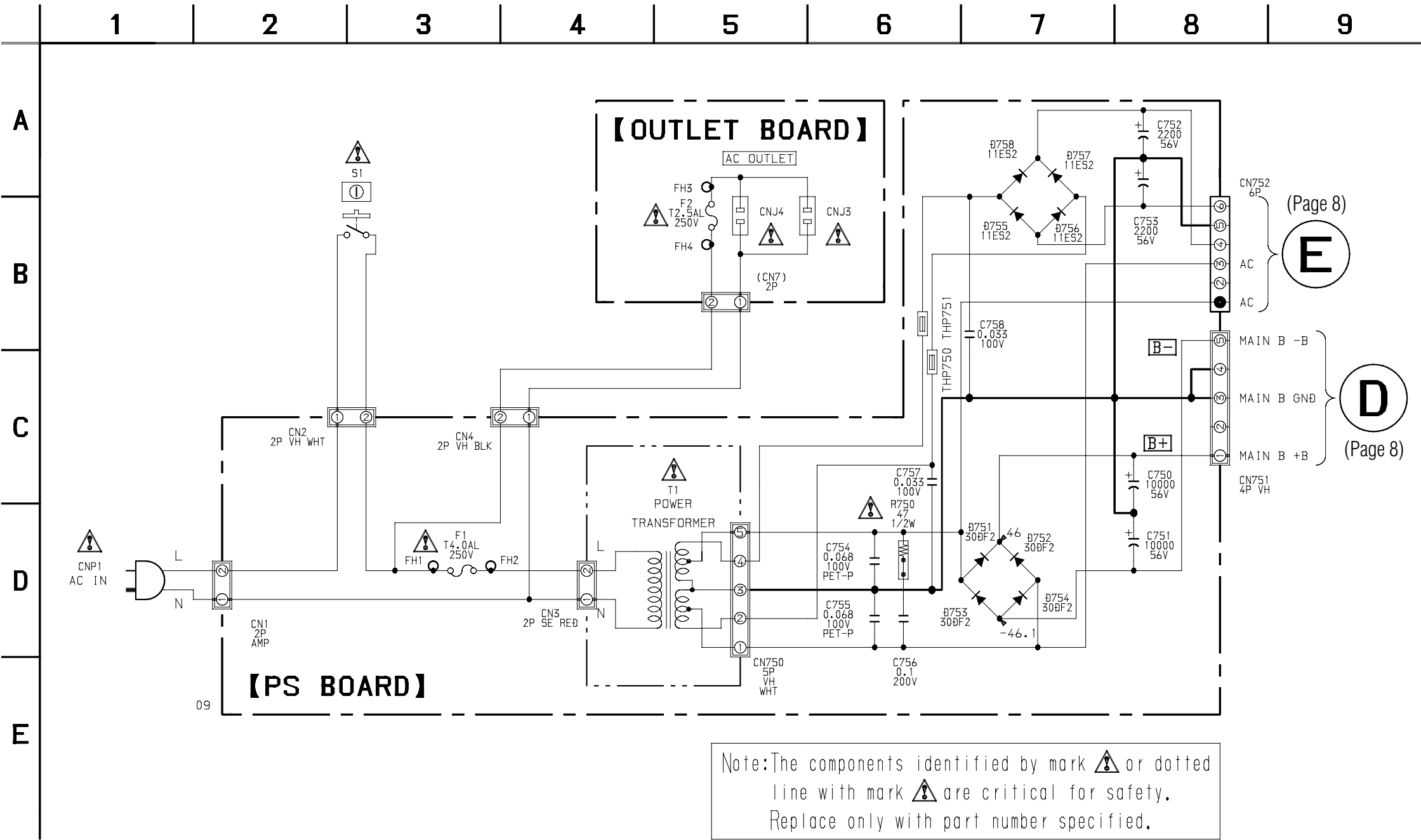


3-7. PRINTED WIRING BOARD – PANEL SECTION –

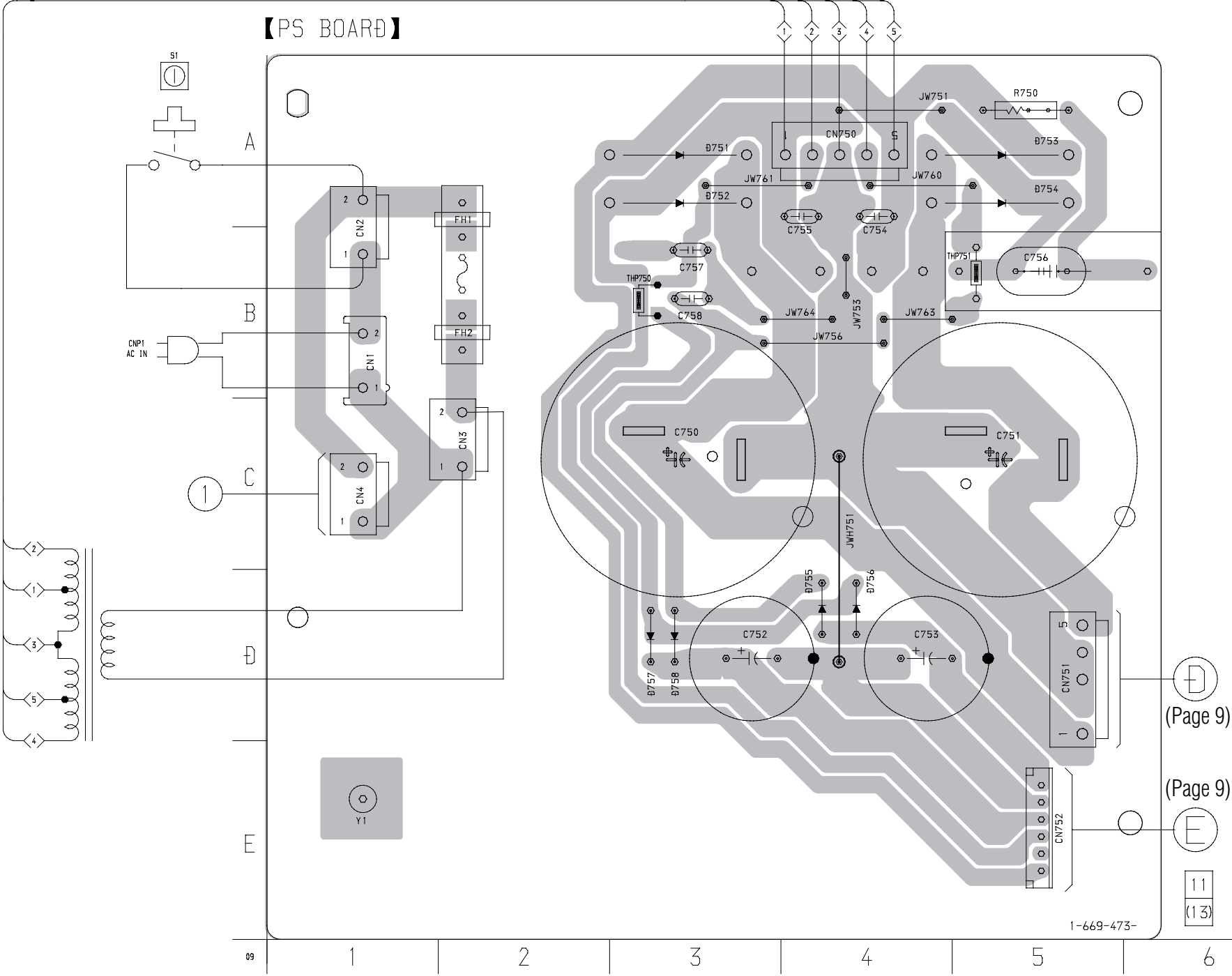
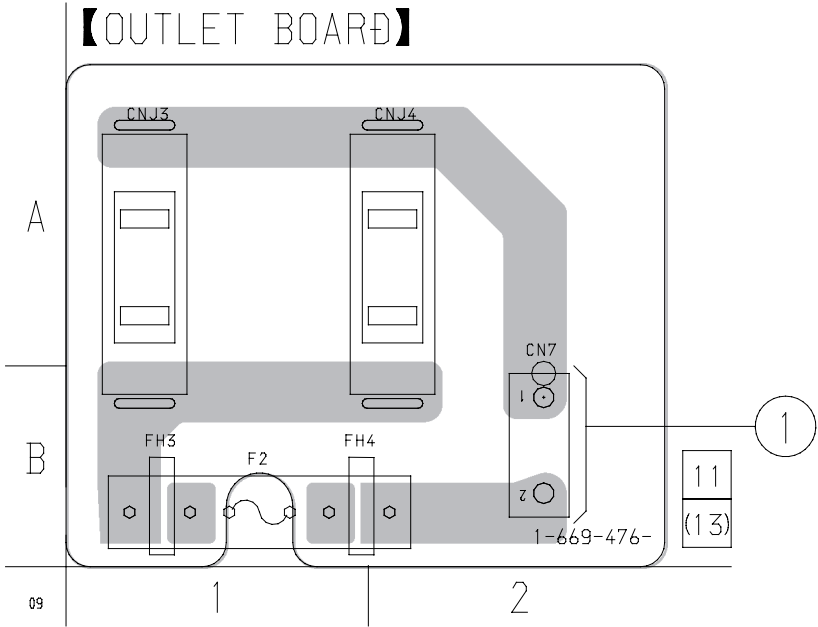
• See page 5 for Circuit Boards Location.



3-8. SCHEMATIC DIAGRAM – POWER SECTION –



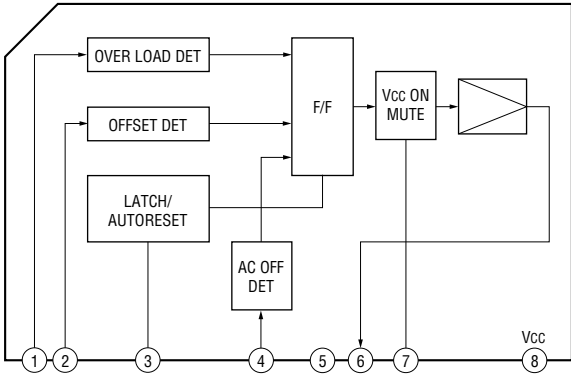
3-9. PRINTED WIRING BOARD – POWER SECTION –
 • See page 5 for Circuit Boards Location.



3-10. IC BLOCK DIAGRAMS

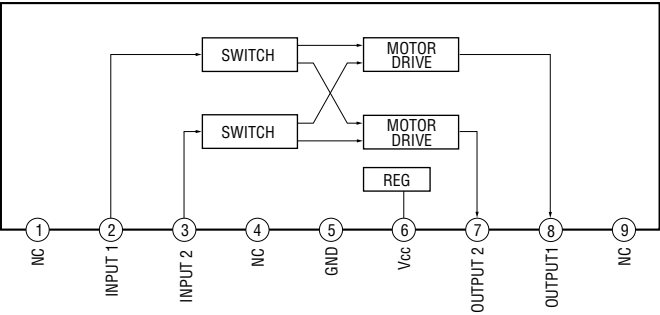
• Main Board

IC700 uPC1237HA



• Panel Board

IC901 BA6208



3-11. IC PIN FUNCTION

• IC902 Input Control & LED Drive (TMP47C103N-JP47) (Panel Board)

Pin No.	Pin Name	I/O	Function
1	X OUT	O	System clock (4MHz)
2	X IN	I	
3	RESET	I	Reset input
4	PMD	I	Mode select input (Connected to ground)
5	VOL +	O	Motor drive output (+)
6	VOL -	O	Motor drive output (-)
7	SW 0	I	Rotary switch input (CD)
8	SW 1	I	Rotary switch input (TUNER)
9	SW 2	I	Rotary switch input (PHONO)
10	EON	I	EON signal input
11	PHONO	O	PHONO LED drive output
12	TUNER	O	TUNER LED drive output
13	CD	O	CD LED drive output
14	GND	—	Ground
15	AUX	O	AUX LED drive output
16	MD/DAT	O	TAPE “2” LED drive output
17	TAPE	O	TAPE “1” LED drive output
18	MON	O	MONITOR output (Connected to ground)
19	PRY	O	Power relay output
20	PKY	I	Power key input (Connected to ground)
21	MOI	I	MONITOR input (Connected to ground)
22	SIRCS	I	SIRCS input
23	MUTE	O	Muting output (Connected to ground)
24	SCE	O	Chip enable output (Connected to ground)
25	SDT	O	Serial data output (Connected to ground)
26	SCK	O	Serial clock output (Connected to ground)
27	STOP	I	STOP input
28	+3V	—	+3V Power supply

SECTION 4



EXPLODED VIEWS

NOTE:

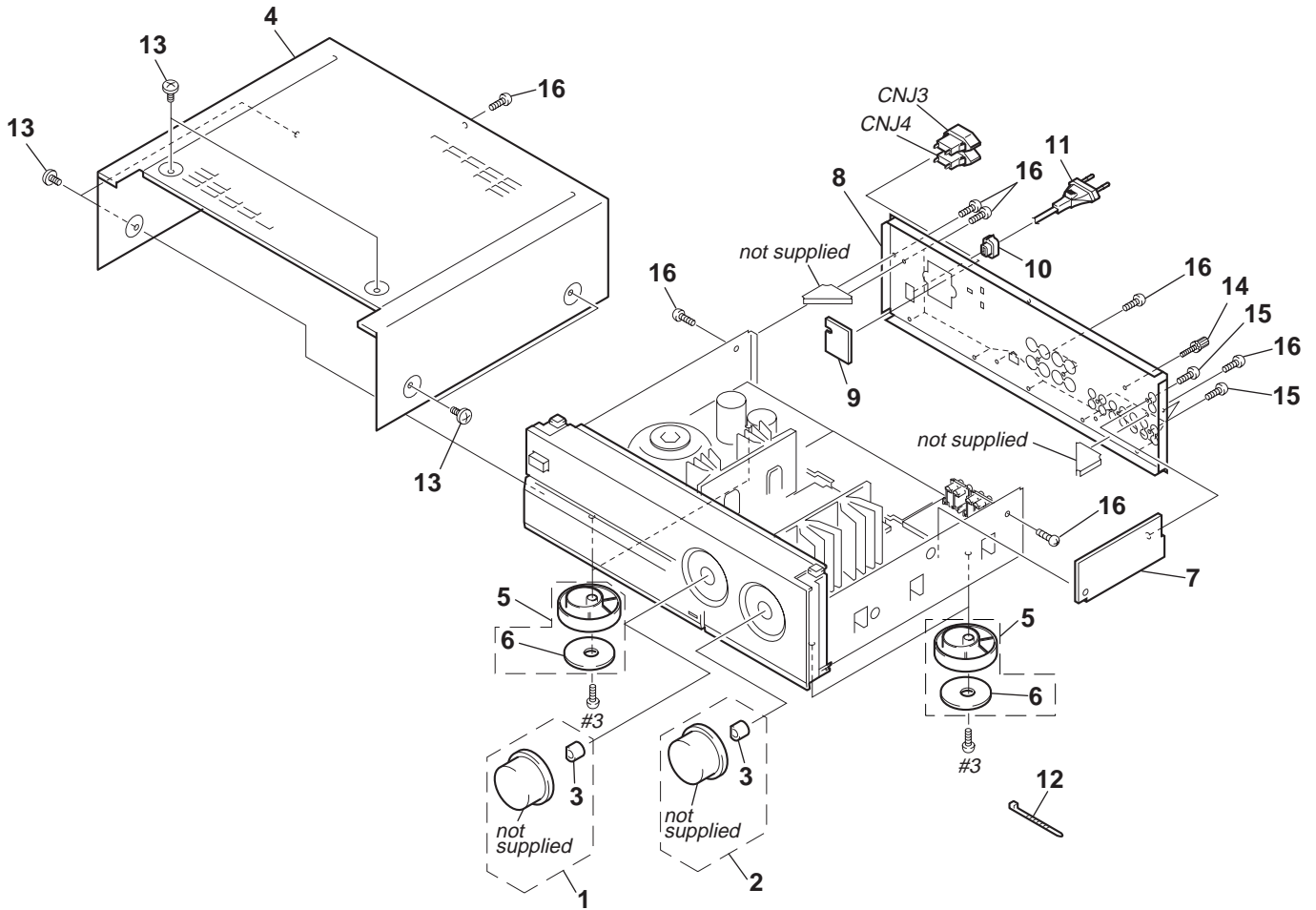
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE)

↑
Parts color

- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

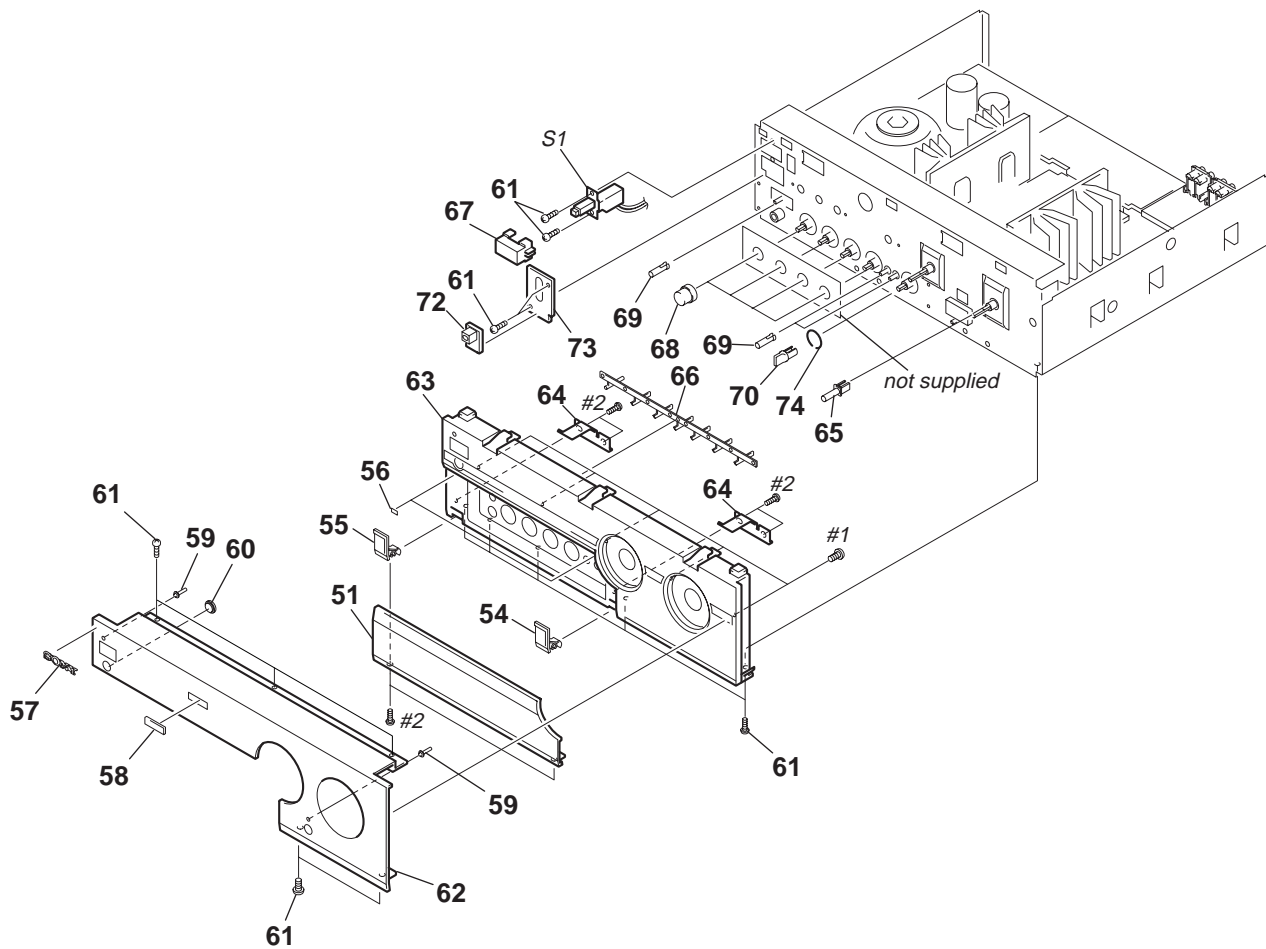
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

4-1. CASE SECTION



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
1	X-4949-780-1	KNOB(SELECTOR) ASSY (BLACK)		* 9	1-669-476-11	OUTLET BOARD	
1	X-4950-264-1	KNOB(SELECTOR) ASSY (SILVER)		* 10	3-703-244-00	BUSHING (2104), CORD	
2	X-4949-781-1	KNOB(VOLUME) ASSY (BLACK)		△ 11	1-777-185-11	CORD, POWER	
2	X-4950-265-1	KNOB(VOLUME) ASSY (SILVER)		12	3-655-653-21	BAND (TAITON), BINDING	
3	3-703-466-00	SPRING (6600)					
* 4	4-999-439-03	CASE(413235)(BLACK)		13	4-210-291-01	SCREW (CASE 3 TP2)(BLACK)	
* 4	4-999-439-43	CASE(413235)(SILVER)		13	4-210-291-11	SCREW (CASE 3 TP2)(SILVER)	
5	X-4949-760-1	FOOT ASSY		14	4-947-010-01	SCREW, FEEDER FIXED	
6	4-970-124-01	CUSHION (F50180S)		15	3-704-515-51	SCREW (BV/RING)	
7	A-4419-860-A	PHONO BOARD, COMPLETE		16	4-974-510-01	SCREW (+BV 3X8 CU)	
				△ CNJ3	1-526-794-11	OUTLET, AC	
8	4-218-231-21	PANEL, BACK		△ CNJ4	1-526-794-11	OUTLET, AC	

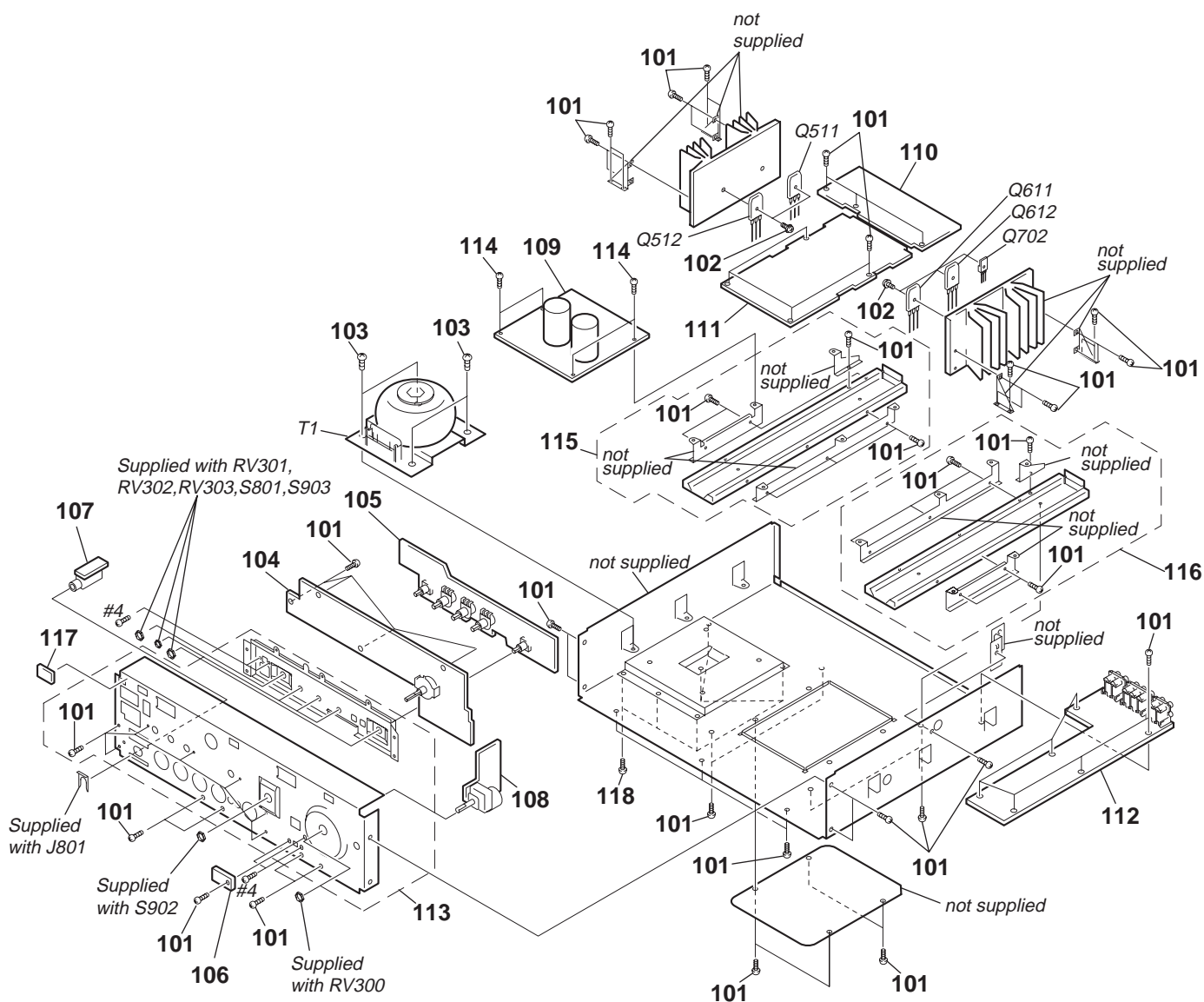
4-2. FRONT PANEL SECTION




The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-999-407-21	DOOR(BLACK)		63	X-4950-263-1	BASE ASSY, PANEL (SILVER)	
51	4-999-407-31	DOOR(SILVER)		64	4-221-595-01	SPRING (DOOR), LEAF	
52	4-900-031-02	KNOB(DOOR)		65	4-999-436-01	BUTTON (DIA. 6X28.8)(BLACK)	
54	4-221-598-01	ARM(DOOR/R)(BLACK)		65	4-999-436-12	BUTTON (DIA. 6X28.8)(SILVER)	
54	4-221-598-11	ARM(DOOR/R)(SILVER)		* 66	4-999-404-02	PLATE (DOOR), INDICATION (BLACK)	
55	4-221-460-01	ARM(DOOR/L)(BLACK)		* 66	4-999-404-13	PLATE (DOOR), INDICATION (SILVER)	
55	4-221-460-11	ARM(DOOR/L)(SILVER)		67	3-024-055-01	BUTTON (POWER)(BLACK)	
* 56	4-999-492-01	CUSHION (DOOR)(BLACK)		67	3-024-055-22	BUTTON (POWER)(SILVER)	
* 56	4-999-492-11	CUSHION (DOOR)(SILVER)		68	4-999-406-01	KNOB(D18)(BLACK)	
57	4-942-568-41	EMBLEM (NO.5), SONY (BLACK)		68	4-999-406-11	KNOB(D18)(SILVER)	
57	4-942-568-61	EMBLEM (NO.5), SONY (SILVER)		69	4-980-773-01	BUTTON (DIA. 6)(BLACK)	
58	4-218-232-02	EMBLEM (MOS)		69	4-980-773-12	BUTTON (DIA. 6)(SILVER)	
59	4-999-413-01	INDICATOR (PROTECTION)		70	4-950-189-01	KNOB(A)(VOL)(BLACK)	
60	4-980-776-01	WINDOW, REMOTE CONTROL		70	4-950-189-61	KNOB(A)(VOL)(SILVER)	
61	4-974-510-01	SCREW (+BV 3X8 CU)		* 72	1-670-219-11	SIRCS SUB BOARD	
62	4-999-402-21	PANEL, FRONT (BLACK)		* 73	1-669-490-11	SIRCS BOARD	
62	4-999-402-31	PANEL, FRONT (SILVER)		74	4-948-469-01	SPRING, RING	
63	X-4949-779-1	BASE ASSY, PANEL (BLACK)		Δ S1	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)	

4-3. CHASSIS SECTION



The components identified by mark or dotted line with mark  are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-974-510-01	SCREW (+BV 3X8 CU)		113	X-4950-316-6	PANEL ASSY, SUB	
102	3-905-609-21	SCREW (TRANSISTOR)		114	4-211-985-01	SCREW (3X8), PC BOARD FITTING	
103	4-967-960-01	SCREW (4X8)					
104	A-4419-849-A	PANEL BOARD, COMPLETE		115	X-4950-314-2	BRACKET (RAIL)(L) ASSY	
				116	X-4950-315-2	BRACKET (RAIL)(R) ASSY	
105	A-4419-850-A	TONE BOARD, COMPLETE		117	4-985-642-01	CUSHION	
* 106	1-669-492-11	S-D LED BOARD		118	4-967-961-01	SCREW (3X8)	
* 107	1-669-491-11	HP BOARD		Q511	8-729-232-45	TRANSISTOR 2SK1529-Y	
* 108	1-669-489-11	VOL BOARD					
109	A-4419-859-A	PS BOARD, COMPLETE		Q512	8-729-232-46	TRANSISTOR 2SJ200-Y	
				Q611	8-729-232-45	TRANSISTOR 2SK1529-Y	
110	A-4419-858-A	SP-TM BOARD, COMPLETE		Q612	8-729-232-46	TRANSISTOR 2SJ200-Y	
111	A-4419-857-A	MAIN BOARD, COMPLETE		Q702	8-729-209-15	TRANSISTOR 2SD2012	
112	A-4419-851-A	INPUT BOARD, COMPLETE		△ T1	1-433-952-11	TRANSFORMER, POWER	

SECTION 5 ELECTRICAL PARTS LIST

Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable

- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H
- Abbreviation

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-669-491-11	HP BOARD *****				< JACK >	
		< JACK >		J101	1-784-934-11	JACK, PIN 4P (TUNER/CD IN)	
J801	1-770-307-11	JACK (LARGE TYPE)(PHONES)		J102	1-770-015-11	JACK, PIN 6P (AUX IN, TAPE2/MD, REC OUT/IN)	
		*****		J103	1-573-028-31	JACK, PIN 4P (TAPE1/DAT, REC OUT/IN)	
		A-4419-851-A INPUT BOARD, COMPLETE *****				< TRANSISTOR >	
		< CAPACITOR >		Q100	8-729-900-80	TRANSISTOR DTC114ES	
C101	1-162-282-31	CERAMIC 100PF 10% 50V		Q101	8-729-900-80	TRANSISTOR DTC114ES	
C102	1-162-282-31	CERAMIC 100PF 10% 50V		Q102	8-729-900-80	TRANSISTOR DTC114ES	
C103	1-162-282-31	CERAMIC 100PF 10% 50V		Q103	8-729-900-80	TRANSISTOR DTC114ES	
C104	1-162-282-31	CERAMIC 100PF 10% 50V		Q104	8-729-900-80	TRANSISTOR DTC114ES	
C105	1-162-282-31	CERAMIC 100PF 10% 50V				< RESISTOR >	
C140	1-126-052-11	ELECT 100uF 20% 50V		Q105	8-729-900-80	TRANSISTOR DTC114ES	
C141	1-126-023-11	ELECT 100uF 20% 25V		Q140	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C142	1-126-024-11	ELECT 220uF 20% 25V		Q240	8-729-201-53	TRANSISTOR 2SA1015-GR	
C201	1-162-282-31	CERAMIC 100PF 10% 50V				< RESISTOR >	
C202	1-162-282-31	CERAMIC 100PF 10% 50V		R101	1-259-239-11	CARBON 1M 5% 1/4W	
C203	1-162-282-31	CERAMIC 100PF 10% 50V		R102	1-259-239-11	CARBON 1M 5% 1/4W	
C204	1-162-282-31	CERAMIC 100PF 10% 50V		R103	1-259-239-11	CARBON 1M 5% 1/4W	
C205	1-162-282-31	CERAMIC 100PF 10% 50V		R104	1-259-239-11	CARBON 1M 5% 1/4W	
C240	1-126-052-11	ELECT 100uF 20% 50V		R105	1-259-239-11	CARBON 1M 5% 1/4W	
C241	1-126-023-11	ELECT 100uF 20% 25V					
C242	1-126-024-11	ELECT 220uF 20% 25V		R114	1-259-239-11	CARBON 1M 5% 1/4W	
		< CONNECTOR >		R115	1-259-239-11	CARBON 1M 5% 1/4W	
CN102	1-691-768-11	PLUG (MICRO CONNECTOR) 6P		R124	1-259-167-21	CARBON 1K 5% 1/4W	
CN103	1-691-773-11	PLUG (MICRO CONNECTOR) 11P		R125	1-259-167-21	CARBON 1K 5% 1/4W	
CN104	1-691-765-11	PLUG (MICRO CONNECTOR) 3P		R140	1-249-198-11	CARBON 330 5% 1/3W	
		< DIODE >					
D100	8-719-911-19	DIODE 1SS119-25		R141	1-249-198-11	CARBON 330 5% 1/3W	
D101	8-719-911-19	DIODE 1SS119-25		R142	1-249-198-11	CARBON 330 5% 1/3W	
D102	8-719-911-19	DIODE 1SS119-25		R143	1-249-198-11	CARBON 330 5% 1/3W	
D103	8-719-911-19	DIODE 1SS119-25		R144	1-259-187-11	CARBON 6.8K 5% 1/4W	
D104	8-719-911-19	DIODE 1SS119-25		R201	1-259-239-11	CARBON 1M 5% 1/4W	
D105	8-719-911-19	DIODE 1SS119-25					
D106	8-719-911-19	DIODE 1SS119-25		R202	1-259-239-11	CARBON 1M 5% 1/4W	
D107	8-719-911-19	DIODE 1SS119-25		R203	1-259-239-11	CARBON 1M 5% 1/4W	
D108	8-719-986-29	DIODE HZS12B3LTA		R204	1-259-239-11	CARBON 1M 5% 1/4W	
D140	8-719-986-38	DIODE HZS16-1LTA		R205	1-259-239-11	CARBON 1M 5% 1/4W	
				R214	1-259-239-11	CARBON 1M 5% 1/4W	
D240	8-719-986-38	DIODE HZS16-1LTA					
				R215	1-259-239-11	CARBON 1M 5% 1/4W	
				R224	1-259-167-21	CARBON 1K 5% 1/4W	
				R225	1-259-167-21	CARBON 1K 5% 1/4W	
				R240	1-249-198-11	CARBON 330 5% 1/3W	
				R241	1-249-198-11	CARBON 330 5% 1/3W	
				R242	1-249-198-11	CARBON 330 5% 1/3W	
				R243	1-249-198-11	CARBON 330 5% 1/3W	
				R244	1-259-187-11	CARBON 6.8K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
		< RELAY >	
RY100	1-515-614-11	RELAY	
RY101	1-515-614-11	RELAY	
RY102	1-515-614-11	RELAY	
RY103	1-515-614-11	RELAY	
RY104	1-515-614-11	RELAY	
RY105	1-515-614-11	RELAY	
RY106	1-515-614-11	RELAY	
RY107	1-515-614-11	RELAY	

A-4419-857-A MAIN BOARD, COMPLETE

< CAPACITOR >

C500	1-102-973-00	CERAMIC	100PF	5%	50V
C501	1-119-824-31	ELECT	10uF	20%	50V
C502	1-136-808-11	FILM	100PF	5%	100V
C503	1-125-852-11	FILM	330PF	5%	50V
C504	1-126-023-11	ELECT	100uF	20%	16V
C505	1-107-587-11	CERAMIC	7PF	0.5PF	500V
C506	1-126-023-11	ELECT	100uF	20%	16V
C507	1-126-023-11	ELECT	100uF	20%	16V
C508	1-119-779-11	ELECT	220uF	20%	10V
C509	1-125-842-11	FILM	4PF	10%	50V
C510	1-119-836-21	ELECT	47uF	20%	63V
C511	1-102-978-00	CERAMIC	220PF	5%	50V
C512	1-136-163-00	FILM	0.068uF	5%	50V
C513	1-136-163-00	FILM	0.068uF	5%	50V
C517	1-126-023-11	ELECT	100uF	20%	16V
C600	1-102-973-00	CERAMIC	100PF	5%	50V
C601	1-119-824-31	ELECT	10uF	20%	50V
C602	1-136-808-11	FILM	100PF	5%	100V
C603	1-125-852-11	FILM	330PF	5%	50V
C604	1-126-023-11	ELECT	100uF	20%	16V
C605	1-107-587-11	CERAMIC	7PF	0.5PF	500V
C606	1-126-023-11	ELECT	100uF	20%	16V
C607	1-126-023-11	ELECT	100uF	20%	16V
C608	1-119-779-11	ELECT	220uF	20%	10V
C609	1-125-842-11	FILM	4PF	10%	50V
C610	1-119-836-21	ELECT	47uF	20%	63V
C611	1-102-978-00	CERAMIC	220PF	5%	50V
C612	1-136-163-00	FILM	0.068uF	5%	50V
C613	1-136-163-00	FILM	0.068uF	5%	50V
C617	1-126-023-11	ELECT	100uF	20%	16V
C712	1-128-552-51	ELECT	47uF	20%	63V
C713	1-126-933-11	ELECT	100uF	20%	16V
C714	1-126-964-11	ELECT	10uF	20%	50V
C720	1-113-618-11	ELECT	2200uF	20%	56V
C721	1-113-618-11	ELECT	2200uF	20%	56V
		< CONNECTOR >			
* CN500	1-564-506-11	PLUG, CONNECTOR 3P			
CN503	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
* CN600	1-564-506-11	PLUG, CONNECTOR 3P			
CN700	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D500	8-719-911-19	DIODE 1SS119-25	
D501	8-719-911-19	DIODE 1SS119-25	
D502	8-719-911-19	DIODE 1SS119-25	
D503	8-719-933-39	DIODE HZS6C1LTA	
D504	8-719-911-19	DIODE 1SS119-25	
D505	8-719-911-19	DIODE 1SS119-25	
D506	8-719-310-61	DIODE SEL1510C-CD-TP3	
D507	8-719-911-19	DIODE 1SS119-25	
D508	8-719-911-19	DIODE 1SS119-25	
D600	8-719-911-19	DIODE 1SS119-25	

D601	8-719-911-19	DIODE 1SS119-25
D602	8-719-911-19	DIODE 1SS119-25
D603	8-719-933-39	DIODE HZS6C1LTA
D604	8-719-911-19	DIODE 1SS119-25
D605	8-719-911-19	DIODE 1SS119-25

D606	8-719-310-61	DIODE SEL1510C-CD-TP3
D607	8-719-911-19	DIODE 1SS119-25
D608	8-719-911-19	DIODE 1SS119-25
D703	8-719-933-39	DIODE HZS6C1LTA

< BRIDGE >

JWH711	4-999-918-01	BRIDGE (PC-BOARD)
JWH712	4-999-918-01	BRIDGE (PC-BOARD)
JWH713	4-999-918-01	BRIDGE (PC-BOARD)
JWH714	4-999-918-01	BRIDGE (PC-BOARD)
JWH715	4-999-918-01	BRIDGE (PC-BOARD)

< TRANSISTOR >

Q500	8-729-045-15	TRANSISTOR	2SC5169-FG
Q501	8-729-201-53	TRANSISTOR	2SA1015-GR
Q502	8-729-201-53	TRANSISTOR	2SA1015-GR
Q503	8-729-201-53	TRANSISTOR	2SA1015-GR
Q504	8-729-021-74	TRANSISTOR	2SA949-OY
Q505	8-729-202-67	TRANSISTOR	2SK246GR-3
Q506	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q507	8-729-021-73	TRANSISTOR	2SC2229-OY
Q508	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q509	8-729-104-18	TRANSISTOR	2SC3514
Q510	8-729-104-91	TRANSISTOR	2SA1383
Q511	8-729-232-45	TRANSISTOR	2SK1529-Y
Q512	8-729-232-46	TRANSISTOR	2SJ200-Y
Q513	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q514	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q600	8-729-045-15	TRANSISTOR	2SC5169-FG
Q601	8-729-201-53	TRANSISTOR	2SA1015-GR
Q602	8-729-201-53	TRANSISTOR	2SA1015-GR
Q603	8-729-201-53	TRANSISTOR	2SA1015-GR
Q604	8-729-021-74	TRANSISTOR	2SA949-OY
Q605	8-729-202-67	TRANSISTOR	2SK246GR-3
Q606	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q607	8-729-021-73	TRANSISTOR	2SC2229-OY
Q608	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q609	8-729-104-18	TRANSISTOR	2SC3514
Q610	8-729-104-91	TRANSISTOR	2SA1383
Q611	8-729-232-45	TRANSISTOR	2SK1529-Y
Q612	8-729-232-46	TRANSISTOR	2SJ200-Y

MAIN

OUTLET

PANEL

Ref. No.	Part No.	Description	Remark			
Q613	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q614	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q702	8-729-209-15	TRANSISTOR	2SD2012			
< RESISTOR >						
R500	1-259-167-21	CARBON	1K	5%	1/4W	
R501	1-259-215-21	CARBON	100K	5%	1/4W	
R502	1-259-151-21	CARBON	220	5%	1/4W	
R503	1-259-151-21	CARBON	220	5%	1/4W	
R504	1-259-151-21	CARBON	220	5%	1/4W	
R505	1-259-179-21	CARBON	3.3K	5%	1/4W	
R506	1-259-151-21	CARBON	220	5%	1/4W	
R507	1-259-151-21	CARBON	220	5%	1/4W	
R508	1-249-490-11	CARBON	27K	5%	1/3W	
R509	1-259-175-11	CARBON	2.2K	5%	1/4W	
R510	1-259-183-11	CARBON	4.7K	5%	1/4W	
△ R511	1-249-405-11	CARBON	100	5%	1/4W	F
R512	1-259-171-21	CARBON	1.5K	5%	1/4W	
R513	1-259-167-21	CARBON	1K	5%	1/4W	
R514	1-249-721-11	CARBON	100K	5%	1/2W	
R515	1-259-143-21	CARBON	100	5%	1/4W	
R516	1-247-749-11	CARBON	560	5%	1/2W	F
△ R517	1-247-688-11	CARBON	10	5%	1/4W	F
△ R518	1-247-688-11	CARBON	10	5%	1/4W	F
△ R519	1-247-745-11	CARBON	330	5%	1/2W	F
△ R520	1-249-405-11	CARBON	100	5%	1/4W	F
△ R521	1-249-405-11	CARBON	100	5%	1/4W	F
△ R522	1-208-603-11	REGISTER	0.1	10%	5W	F
△ R523	1-208-603-11	REGISTER	0.1	10%	5W	F
R524	1-259-424-11	CARBON	680	5%	1/6W	
△ R526	1-217-997-11	FUSIBLE	10	5%	1/2W	F
R527	1-259-484-11	CARBON	220K	5%	1/6W	
R532	1-259-420-11	CARBON	470	5%	1/6W	
R533	1-249-431-11	CARBON	15K	5%	1/4W	
R600	1-259-167-21	CARBON	1K	5%	1/4W	
R601	1-259-215-21	CARBON	100K	5%	1/4W	
R602	1-259-151-21	CARBON	220	5%	1/4W	
R603	1-259-151-21	CARBON	220	5%	1/4W	
R604	1-259-151-21	CARBON	220	5%	1/4W	
R605	1-259-179-21	CARBON	3.3K	5%	1/4W	
R606	1-259-151-21	CARBON	220	5%	1/4W	
R607	1-259-151-21	CARBON	220	5%	1/4W	
R608	1-249-490-11	CARBON	27K	5%	1/3W	
R609	1-259-175-11	CARBON	2.2K	5%	1/4W	
R610	1-259-183-11	CARBON	4.7K	5%	1/4W	
△ R611	1-249-405-11	CARBON	100	5%	1/4W	F
R612	1-259-171-21	CARBON	1.5K	5%	1/4W	
R613	1-259-167-21	CARBON	1K	5%	1/4W	
R614	1-249-721-11	CARBON	100K	5%	1/2W	
R615	1-259-143-21	CARBON	100	5%	1/4W	
R616	1-247-749-11	CARBON	560	5%	1/2W	F
△ R617	1-247-688-11	CARBON	10	5%	1/4W	F
△ R618	1-247-688-11	CARBON	10	5%	1/4W	F
△ R619	1-247-745-11	CARBON	330	5%	1/2W	F
△ R620	1-249-405-11	CARBON	100	5%	1/4W	F
△ R621	1-249-405-11	CARBON	100	5%	1/4W	F

Ref. No.	Part No.	Description			Remark
△ R622	1-208-603-11	REGISTER	0.1	10%	5W F
△ R623	1-208-603-11	REGISTER	0.1	10%	5W F
R624	1-259-424-11	CARBON	680	5%	1/6W
△ R626	1-217-997-11	FUSIBLE	10	5%	1/2W F
R627	1-259-484-11	CARBON	220K	5%	1/6W
R632	1-259-420-11	CARBON	470	5%	1/6W
R633	1-249-431-11	CARBON	15K	5%	1/4W
R709	1-249-425-11	CARBON	4.7K	5%	1/4W F
< VARIABLE RESISTOR >					
RV500	1-241-762-11	RES, ADJ, CARBON 2.2K (BIAS L)			
RV600	1-241-762-11	RES, ADJ, CARBON 2.2K (BIAS R)			

*	1-669-476-11	OUTLET BOARD			

< JACK >					
△ CNJ3	1-526-794-11	OUTLET AC (AC OUTLET)			
△ CNJ4	1-526-794-11	OUTLET AC (AC OUTLET)			
< FUSE >					
△ F2	1-532-464-51	FUSE (T2.5AL/250V)			
< FUSE HOLDER >					
FH3	1-533-233-11	HOLDER, FUSE			
FH4	1-533-233-11	HOLDER, FUSE			

A-4419-849-A	PANEL BOARD, COMPLETE				

< CAPACITOR >					
C900	1-126-786-11	ELECT	47uF	20%	16V
C901	1-126-916-11	ELECT	1000uF	20%	6.3V
C902	1-162-294-31	CERAMIC	0.001uF	10%	50V
C903	1-162-294-31	CERAMIC	0.001uF	10%	50V
C904	1-164-159-11	CERAMIC	0.1uF		50V
C905	1-162-294-31	CERAMIC	0.001uF	10%	50V
C906	1-126-795-11	ELECT	10uF	20%	50V
C907	1-162-294-31	CERAMIC	0.001uF	10%	50V
C908	1-126-786-11	ELECT	47uF	20%	16V
C909	1-126-795-11	ELECT	10uF	20%	50V
C912	1-126-786-11	ELECT	47uF	20%	16V
< CONNECTOR >					
* CN300	1-564-522-11	PLUG, CONNECTOR 7P			
* CN301	1-564-526-11	PLUG, CONNECTOR 11P			
CN304	1-785-438-11	CONNECTOR, BOARD TO BOARD 10P			
CN903	1-766-928-11	CONNECTOR, BOARD TO BOARD 8P			
* CN904	1-564-527-11	PLUG, CONNECTOR 12P			
* CN905	1-564-522-11	PLUG, CONNECTOR 7P			
* CN907	1-774-252-11	CONNECTOR, BOARD TO BOARD 8P			

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< DIODE >				R901	1-249-393-11	CARBON 10 5%	1/4W F
D901	8-719-313-50	DIODE SEL6810A-TH12 (EON LINK)		R905	1-249-429-11	CARBON 10K 5%	1/4W
D902	8-719-313-50	DIODE SEL6810A-TH12 (PHONO)		R906	1-249-429-11	CARBON 10K 5%	1/4W
D903	8-719-313-50	DIODE SEL6810A-TH12 (TUNER)		R907	1-249-429-11	CARBON 10K 5%	1/4W
D904	8-719-313-50	DIODE SEL6810A-TH12 (CD)		R908	1-249-437-11	CARBON 47K 5%	1/4W
D905	8-719-313-50	DIODE SEL6810A-TH12 (AUX)		R909	1-249-429-11	CARBON 10K 5%	1/4W
D906	8-719-313-50	DIODE SEL6810A-TH12 (TAPE2/MD)		R910	1-249-401-11	CARBON 47 5%	1/4W F
D907	8-719-313-50	DIODE SEL6810A-TH12 (TAPE1/DAT)		R911	1-249-411-11	CARBON 330 5%	1/4W
D910	8-719-911-19	DIODE 1SS119-25		R912	1-249-429-11	CARBON 10K 5%	1/4W
D911	8-719-911-19	DIODE 1SS119-25		R913	1-249-425-11	CARBON 4.7K 5%	1/4W F
D912	8-719-911-19	DIODE 1SS119-25		R914	1-247-807-31	CARBON 100 5%	1/4W
D913	8-719-911-19	DIODE 1SS119-25		R917	1-249-433-11	CARBON 22K 5%	1/4W
D914	8-719-911-19	DIODE 1SS119-25		R918	1-249-421-11	CARBON 2.2K 5%	1/4W F
D915	8-719-911-19	DIODE 1SS119-25		R919	1-249-421-11	CARBON 2.2K 5%	1/4W F
D916	8-719-024-99	DIODE 11ES2-NTA2B		R920	1-249-429-11	CARBON 10K 5%	1/4W
D917	8-719-911-19	DIODE 1SS119-25		R921	1-249-429-11	CARBON 10K 5%	1/4W
D918	8-719-985-66	DIODE HZS5BLL-TA		R922	1-249-429-11	CARBON 10K 5%	1/4W
D919	8-719-911-19	DIODE 1SS119-25		R923	1-249-429-11	CARBON 10K 5%	1/4W
D920	8-719-911-19	DIODE 1SS119-25		R924	1-249-429-11	CARBON 10K 5%	1/4W
D921	8-719-911-19	DIODE 1SS119-25		R958	1-249-403-11	CARBON 68 5%	1/4W F
D922	8-719-911-19	DIODE 1SS119-25		< SWITCH >			
D923	8-719-911-19	DIODE 1SS119-25		S301	1-571-112-21	SWITCH, PUSH (1 KEY)(SUBSONIC OFF<-ON)	
D924	8-719-911-19	DIODE 1SS119-25		S302	1-762-393-11	SWITCH, PUSH (SOURCE DIRECT)	
< IC >				S303	1-762-387-11	SWITCH, PUSH (LOUDNESS OFF<-ON)	
IC901	8-759-962-08	IC BA6208		S801	1-771-384-11	SWITCH, ROTARY (SPEAKERS)	
IC902	8-759-392-41	IC TMP47C103N-JP47		S901	1-762-203-11	SWITCH, PUSH (1 KEY)(EON LINK)	
< PHOTO INTERRUPTER >				S902	1-771-383-12	SWITCH, ROTARY (INPUT SELECTOR)	
				S903	1-762-656-11	SWITCH, ROTARY (TAPE MONITOR)	
PH900	8-719-902-56	PHOTO COUPLER PC817		< VIBRATOR >			
< TRANSISTOR >				X900	1-577-358-21	VIBRATOR, CERAMIC (4MHZ)	
Q900	8-729-620-05	TRANSISTOR 2SC2603TP-EF		*****			
Q901	8-729-900-63	TRANSISTOR DTA124ES					
Q902	8-729-900-63	TRANSISTOR DTA124ES		A-4419-860-A	PHONO BOARD, COMPLETE		
Q903	8-729-900-80	TRANSISTOR DTC114ES		*****			
Q904	8-729-422-57	TRANSISTOR UN4111		< CAPACITOR >			
Q905	8-729-422-57	TRANSISTOR UN4111		C150	1-102-978-00	CERAMIC 220PF 5%	50V
Q906	8-729-422-57	TRANSISTOR UN4111		C151	1-126-059-11	ELECT 10uF 20%	50V
Q907	8-729-119-78	TRANSISTOR 2SC2785-HFE		C152	1-136-808-11	FILM 100PF 5%	100V
Q908	8-729-620-05	TRANSISTOR 2SC2603TP-EF		C153	1-106-359-00	MYLAR 4700PF 5%	200V
Q909	8-729-620-05	TRANSISTOR 2SC2603TP-EF		C154	1-126-023-11	ELECT 100uF 20%	16V
Q910	8-729-422-57	TRANSISTOR UN4111		C155	1-130-341-00	FILM 0.056uF 3%	100V
Q911	8-729-201-53	TRANSISTOR 2SA1015TP-YGR		C156	1-130-971-00	FILM 0.016uF 3%	100V
Q920	8-729-422-57	TRANSISTOR UN4111		C157	1-126-059-11	ELECT 10uF 20%	50V
Q921	8-729-422-57	TRANSISTOR UN4111		C170	1-126-023-11	ELECT 100uF 20%	16V
Q922	8-729-422-57	TRANSISTOR UN4111		C171	1-126-023-11	ELECT 100uF 20%	16V
Q923	8-729-422-57	TRANSISTOR UN4111		C172	1-126-023-11	ELECT 100uF 20%	16V
Q924	8-729-422-57	TRANSISTOR UN4111		C250	1-102-978-00	CERAMIC 220PF 5%	50V
Q925	8-729-422-57	TRANSISTOR UN4111		C251	1-126-059-11	ELECT 10uF 20%	50V
< RESISTOR >				C252	1-136-808-11	FILM 100PF 5%	100V
R310	1-259-464-11	CARBON 33K 5%	1/6W	C253	1-106-359-00	MYLAR 4700PF 5%	200V
R311	1-259-446-11	CARBON 5.6K 5%	1/6W	C254	1-126-023-11	ELECT 100uF 20%	16V
R410	1-259-464-11	CARBON 33K 5%	1/6W	C255	1-130-341-00	FILM 0.056uF 3%	100V
R411	1-259-446-11	CARBON 5.6K 5%	1/6W	C256	1-130-971-00	FILM 0.016uF 3%	100V

PHONO

PS

S-D LED

Ref. No.	Part No.	Description	Remark		
C257	1-126-059-11	ELECT 10uF 20%	50V		
		< CONNECTOR >			
CN151	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			
		< DIODE >			
D170	8-719-985-97	DIODE HZS7B1LTA			
		< IC >			
IC150	8-759-701-25	IC NJM2068D-D			
		< JACK >			
J150	1-784-933-11	JACK 2P (PHONO IN)			
		< COIL >			
L150	1-410-977-11	INDUCTOR 100uH			
L151	1-410-977-11	INDUCTOR 100uH			
L250	1-410-977-11	INDUCTOR 100uH			
L251	1-410-977-11	INDUCTOR 100uH			
		< TRANSISTOR >			
Q150	8-729-354-52	TRANSISTOR 2SC2545			
Q151	8-729-354-52	TRANSISTOR 2SC2545			
Q250	8-729-354-52	TRANSISTOR 2SC2545			
Q251	8-729-354-52	TRANSISTOR 2SC2545			
		< RESISTOR >			
R150	1-259-175-11	CARBON 2.2K 5%	1/4W		
R151	1-249-911-11	CARBON 330 5%	1/4W		
R152	1-259-215-21	CARBON 100K 5%	1/4W		
R153	1-259-215-21	CARBON 100K 5%	1/4W		
R154	1-259-161-21	CARBON 560 5%	1/4W		
R155	1-259-161-21	CARBON 560 5%	1/4W		
R156	1-259-143-21	CARBON 100 5%	1/4W		
R157	1-259-191-21	CARBON 10K 5%	1/4W		
R158	1-249-900-11	CARBON 110 5%	1/4W		
R159	1-249-844-11	CARBON 56K 1%	1/2W		
R160	1-259-320-11	CARBON 4.7K 1%	1/2W		
R161	1-259-239-11	CARBON 1M 5%	1/4W		
R162	1-259-167-21	CARBON 1K 5%	1/4W		
R170	1-259-171-21	CARBON 1.5K 5%	1/4W		
R250	1-259-175-11	CARBON 2.2K 5%	1/4W		
R251	1-249-911-11	CARBON 330 5%	1/4W		
R252	1-259-215-21	CARBON 100K 5%	1/4W		
R253	1-259-215-21	CARBON 100K 5%	1/4W		
R254	1-259-161-21	CARBON 560 5%	1/4W		
R255	1-259-161-21	CARBON 560 5%	1/4W		
R256	1-259-143-21	CARBON 100 5%	1/4W		
R257	1-259-191-21	CARBON 10K 5%	1/4W		
R258	1-249-900-11	CARBON 110 5%	1/4W		
R259	1-249-844-11	CARBON 56K 1%	1/2W		
R260	1-259-320-11	CARBON 4.7K 1%	1/2W		
R261	1-259-239-11	CARBON 1M 5%	1/4W		
R262	1-259-167-21	CARBON 1K 5%	1/4W		

Ref. No.	Part No.	Description	Remark		
	A-4419-859-A	PS BOARD, COMPLETE	*****		
< CAPACITOR >					
C750	1-128-974-11	ELECT	10000uF	20%	56V
C751	1-128-974-11	ELECT	10000uF	20%	56V
C752	1-113-618-11	ELECT	2200uF	20%	56V
C753	1-113-618-11	ELECT	2200uF	20%	56V
C754	1-137-398-11	FILM	0.068uF	5%	100V
C755	1-137-398-11	FILM	0.068uF	5%	100V
C756	1-104-999-11	MYLAR	0.1uF	10%	200V
C757	1-137-352-11	FILM	0.033uF	5%	100V
C758	1-137-352-11	FILM	0.033uF	5%	100V
< CONNECTOR >					
CN1	1-774-108-11	PIN, CONNECTOR (PC BOARD)			
CN2	1-564-321-00	PIN, CONNECTOR 2P			
CN3	1-564-321-00	PIN, CONNECTOR 2P			
* CN4	1-564-321-21	PIN, CONNECTOR 2P			
* CN750	1-564-242-00	PIN, CONNECTOR 5P			
* CN751	1-766-920-11	PIN, CONNECTOR 4P			
CN752	1-770-832-11	CONNECTOR, BOARD TO BOARD 6P			
< DIODE >					
D751	8-719-230-02	DIODE	30DF2-FC		
D752	8-719-230-02	DIODE	30DF2-FC		
D753	8-719-230-02	DIODE	30DF2-FC		
D754	8-719-230-02	DIODE	30DF2-FC		
D755	8-719-024-99	DIODE	11ES2-NTA2B		
D756	8-719-024-99	DIODE	11ES2-NTA2B		
D757	8-719-024-99	DIODE	11ES2-NTA2B		
D758	8-719-024-99	DIODE	11ES2-NTA2B		
< FUSE >					
△ F1	1-532-504-51	FUSE (T4.0AL/250V)			
< FUSE HOLDER >					
FH1	1-533-233-11	HOLDER, FUSE			
FH2	1-533-233-11	HOLDER, FUSE			
< RESISTOR >					
△ R750	1-212-974-00	FUSIBLE	47	5%	1/2W F

*	1-669-492-11	S-D LED BOARD			

< CONNECTOR >					
CN910	1-691-758-51	PIN, CONNECTOR 3P			
< DIODE >					
D908	8-719-046-38	DIODE SEL5821A-TH8F (SOURCE DIRECT)			

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

S-D LED

SIRCS

SIRCS SUB

SP-TM

TONE

Ref. No.	Part No.	Description	Remark			
< RESISTOR >						
R927	1-249-406-11	CARBON	120	5%	1/4W	F

*	1-669-490-11	SIRCS BOARD	*****			
< CONNECTOR >						
CN900	1-691-766-11	PLUG (MICRO CONNECTOR) 4P				
* CN911	1-560-666-00	PIN, CONNECTOR 3P				
< DIODE >						
D900	8-719-046-46	DIODE SEL5221S-TH8F (PROTECTION)				
< RESISTOR >						
R900	1-249-409-11	CARBON	220	5%	1/4W	F

*	1-670-219-11	SIRCS SUB BOARD	*****			
< CONNECTOR >						
* CN912	1-565-835-11	SOCKET, CONNECTOR 3P				
< IC >						
IC900	8-759-459-86	IC NJL64H400A (REMOTE CONTROL SENSOR)				

	A-4419-858-A	SP-TM BOARD, COMPLETE	*****			
< CAPACITOR >						
C515	1-162-282-31	CERAMIC	100PF	10%	50V	
C516	1-162-282-31	CERAMIC	100PF	10%	50V	
C615	1-162-282-31	CERAMIC	100PF	10%	50V	
C616	1-162-282-31	CERAMIC	100PF	10%	50V	
C700	1-126-965-11	ELECT	22uF	20%	50V	
C701	1-136-163-00	FILM	0.068uF	5%	50V	
C702	1-124-995-11	ELECT	220uF	20%	10V	
C703	1-136-157-00	FILM	0.022uF	5%	50V	
C704	1-104-664-11	ELECT	47uF	20%	16V	
C705	1-104-664-11	ELECT	47uF	20%	16V	
C706	1-137-150-11	MYLAR	0.01uF	10%	100V	
C707	1-137-150-11	MYLAR	0.01uF	10%	100V	
C708	1-128-578-11	ELECT	1uF	20%	100V	
C709	1-128-556-11	ELECT	1000uF	20%	63V	
C710	1-128-553-11	ELECT	220uF	20%	63V	
C711	1-128-582-11	ELECT	10uF	20%	63V	
C715	1-164-159-11	CERAMIC	0.1uF		50V	
< CONNECTOR >						
CN702	1-770-831-11	CONNECTOR, BOARD TO BOARD 6P				
CN703	1-566-212-11	PIN, CONNECTOR 3P (EON CONTROL)				

Ref. No.	Part No.	Description	Remark			
< DIODE >						
D511	8-719-911-19	DIODE 1SS119-25				
D512	8-719-911-19	DIODE 1SS119-25				
D513	8-719-911-19	DIODE 1SS119-25				
D700	8-719-024-99	DIODE 11ES2-NTA2B				
D701	8-719-024-99	DIODE 11ES2-NTA2B				
D702	8-719-024-99	DIODE 11ES2-NTA2B				
< IC >						
IC700	8-759-111-68	IC uPC1237HA				
< COIL >						
L501	1-411-906-11	COIL, AIR-CORE				
L601	1-411-906-11	COIL, AIR-CORE				
< TRANSISTOR >						
Q700	8-729-119-76	TRANSISTOR	2SA1115-EF			
Q701	8-729-119-78	TRANSISTOR	2SC2785-HFE			
< RESISTOR >						
R528	1-249-162-11	CARBON	10	5%	1/3W	
R529	1-247-750-11	CARBON	680	5%	1/2W	F
△ R530	1-212-857-00	FUSIBLE	10	5%	1/4W	F
△ R531	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R628	1-249-162-11	CARBON	10	5%	1/3W	
R629	1-247-750-11	CARBON	680	5%	1/2W	F
△ R630	1-212-857-00	FUSIBLE	10	5%	1/4W	F
△ R631	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R700	1-249-439-11	CARBON	68K	5%	1/4W	
R701	1-249-429-11	CARBON	10K	5%	1/4W	
R702	1-249-429-11	CARBON	10K	5%	1/4W	
R703	1-259-476-11	CARBON	100K	5%	1/6W	
R704	1-249-433-11	CARBON	22K	5%	1/4W	
R705	1-247-883-00	CARBON	150K	5%	1/4W	
R706	1-249-431-11	CARBON	15K	5%	1/4W	
R707	1-249-429-11	CARBON	10K	5%	1/4W	
△ R708	1-213-082-61	FUSIBLE	82	5%	1W	
R710	1-247-747-11	CARBON	470	5%	1/2W	
R711	1-247-747-11	CARBON	470	5%	1/2W	
< RELAY >						
RY501	1-515-921-11	RELAY (12V)				
RY502	1-515-921-11	RELAY (12V)				
RY503	1-515-920-11	RELAY (24V)				
< TERMINAL >						
TM501	1-537-740-11	TERMINAL BOARD (SPEAKERS)				

A-4419-850-A	TONE BOARD, COMPLETE					

< CAPACITOR >						
C300	1-136-171-00	FILM	0.33uF	5%	50V	
C301	1-130-475-00	MYLAR	0.0022uF	5%	50V	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

TONE

VOL

Ref. No.	Part No.	Description	Remark		
C302	1-136-153-00	FILM	0.01uF	5%	50V
C303	1-136-155-00	FILM	0.015uF	5%	50V
C304	1-136-165-00	FILM	0.1uF	5%	50V
C305	1-136-165-00	FILM	0.1uF	5%	50V
C306	1-130-471-00	MYLAR	0.001uF	5%	50V
C400	1-136-171-00	FILM	0.33uF	5%	50V
C401	1-130-475-00	MYLAR	0.0022uF	5%	50V
C402	1-136-153-00	FILM	0.01uF	5%	50V
C403	1-136-155-00	FILM	0.015uF	5%	50V
C404	1-136-165-00	FILM	0.1uF	5%	50V
C405	1-136-165-00	FILM	0.1uF	5%	50V
C406	1-130-471-00	MYLAR	0.001uF	5%	50V
< CONNECTOR >					
CN305	1-785-440-11	CONNECTOR, BOARD TO BOARD 10P			
* CN801	1-564-524-11	PLUG, CONNECTOR 9P			
* CN802	1-564-519-11	PLUG, CONNECTOR 4P			
CN901	1-785-420-11	CONNECTOR, BOARD TO BOARD 8P			
CN908	1-785-439-11	CONNECTOR, BOARD TO BOARD 8P			
< RESISTOR >					
R300	1-259-500-11	CARBON	1M	5%	1/6W
R301	1-259-500-11	CARBON	1M	5%	1/6W
R302	1-259-446-11	CARBON	5.6K	5%	1/6W
R303	1-259-436-11	CARBON	2.2K	5%	1/6W
R304	1-259-500-11	CARBON	1M	5%	1/6W
R305	1-259-464-11	CARBON	33K	5%	1/6W
R306	1-259-456-11	CARBON	15K	5%	1/6W
R307	1-259-446-11	CARBON	5.6K	5%	1/6W
R308	1-259-456-11	CARBON	15K	5%	1/6W
R309	1-259-500-11	CARBON	1M	5%	1/6W
R391	1-249-429-11	CARBON	10K	5%	1/4W
R392	1-249-429-11	CARBON	10K	5%	1/4W
R393	1-249-429-11	CARBON	10K	5%	1/4W
R400	1-259-500-11	CARBON	1M	5%	1/6W
R401	1-259-500-11	CARBON	1M	5%	1/6W
R402	1-259-446-11	CARBON	5.6K	5%	1/6W
R403	1-259-436-11	CARBON	2.2K	5%	1/6W
R404	1-259-500-11	CARBON	1M	5%	1/6W
R405	1-259-464-11	CARBON	33K	5%	1/6W
R406	1-259-456-11	CARBON	15K	5%	1/6W
R407	1-259-446-11	CARBON	5.6K	5%	1/6W
R408	1-259-456-11	CARBON	15K	5%	1/6W
R409	1-259-500-11	CARBON	1M	5%	1/6W
R801	1-247-751-11	CARBON	820	5%	1/2W
R802	1-247-751-11	CARBON	820	5%	1/2W
R803	1-247-751-11	CARBON	820	5%	1/2W
R804	1-247-751-11	CARBON	820	5%	1/2W
R805	1-247-751-11	CARBON	820	5%	1/2W
R806	1-247-751-11	CARBON	820	5%	1/2W
R807	1-247-747-11	CARBON	470	5%	1/2W
R808	1-247-747-11	CARBON	470	5%	1/2W
R809	1-247-747-11	CARBON	470	5%	1/2W
R810	1-247-747-11	CARBON	470	5%	1/2W
R902	1-247-751-11	CARBON	820	5%	1/2W
R904	1-249-429-11	CARBON	10K	5%	1/4W
R916	1-247-239-00	CARBON	910	5%	1/2W

Ref. No.	Part No.	Description	Remark		
< VARIABLE RESISTOR >					
RV301	1-225-642-11	RES, VAR, CARBON 250K/250K (BALANCE)			
RV302	1-225-643-11	RES, VAR, CARBON 250K/250K (TREBLE TONE)			
RV303	1-225-644-11	RES, VAR, CARBON 900K/900K (BASS TONE)			

*	1-669-489-11	VOL BOARD			

< CAPACITOR >					
C310	1-136-165-00	FILM	0.1uF	5% 50V	
< CONNECTOR >					
CN302	1-691-772-11	PLUG (MICRO CONNECTOR) 10P			
CN303	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			
< VARIABLE RESISTOR >					
RV300	1-225-675-11	RES, VAR, CARBON 120K/120K (VOLUME)			

MISCELLANEOUS					

△ 11	1-777-185-11	CORD, POWER			
△ CNJ3	1-526-794-11	OUTLET, AC			
△ CNJ4	1-526-794-11	OUTLET, AC			
Q511	8-729-232-45	TRANSISTOR 2SK1529-Y			
Q512	8-729-232-46	TRANSISTOR 2SJ200-Y			
Q611	8-729-232-45	TRANSISTOR 2SK1529-Y			
Q612	8-729-232-46	TRANSISTOR 2SJ200-Y			
Q702	8-729-209-15	TRANSISTOR 2SD2012			
△ S1	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)			
△ T1	1-433-952-11	TRANSFORMER, POWER			

ACCESSORIES & PACKING MATERIALS					

	1-473-656-11	REMOTE COMMANDER (RM-S316)			
	3-866-636-11	MANUAL, INSTRUCTION			
		(ENGLISH, FRENCH, SPANISH, PORTUGUESE)			
	3-866-636-21	MANUAL, INSTRUCTION			
		(GERMAN, DUTCH, SWEDISH, ITALIAN)			
	4-981-643-01	COVER, BATTERY (FOR RM-S316)			

HARDWARE LIST					

#1	7-682-548-09	SCREW +B 3X8			
#2	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S (SILVER)			
#2	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S (BLACK)			
#3	7-685-885-09	SCREW +BVT 4X16 (S)			
#4	7-685-872-09	SCREW +BVT 3X8 (S)			

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.